

SEQUENCE LISTING

<110> Avalon Pharmaceuticals

<120> Cancer-Linked Gene as Target for Chemotherapy

<130> 689290-165

<140>

<141>

<150> US/60/385,505

<151> 2002-06-04

<160> 39

<170> PatentIn version 3.0

<210> 1

<211> 4567

<212> DNA

<213> Homo sapiens

<400> 1

gcggccgccc	cattcccaga	ccggccgcca	gcccatctgg	ttagctcccg	ccgctccgcg	60
ccgcccggga	gtcgggagcc	gcggggaacc	gggcacctgc	acccgcctct	gggagtgagt	120
ggttccagct	ggtgcctggc	ctgtgtctct	tggatgccct	gtggcttcag	tccgtctcct	180
gttgcgccacc	acctcgctcc	tgggcccgcct	gataccccag	cccaacagct	aaggtgtgga	240
tggacagtag	ggggctggct	tctctcactg	gtcaggggtc	ttctcccctg	tctgcctccc	300
ggagctagga	ctgcagaggg	gcctatcatg	gtgcttgca	gccccctggc	tgtctcgctg	360
ttgctgccca	gcctcacact	gctggtgtcc	cacctctcca	gctcccagga	tgtctccagt	420
gagcccagca	gtgagcagca	gctgtgcgcc	cttagcaagc	accccaccgt	ggcctttgaa	480
gacctgcagc	cgtgggtctc	taacttcacc	tacctggag	cccgggattt	ctcccagctg	540
gctttggacc	cctccgggaa	ccagctcatc	gtgggagcca	ggaactacct	cttcagactc	600
agccttgcca	atgtctctct	tcttcaggcc	acagagtggg	cctccagtga	ggacacgcgc	660
cgctcctgcc	aaagcaaagg	gaagactgag	gaggagtgtc	agaactacgt	gcgagtcctg	720
atcgctcgcc	gccggaaggt	gttcattgtg	ggaaccaatg	ccttttcccc	catgtgcacc	780
agcagacagg	tggggaacct	cagccggact	actgagaaga	tcaatgggtg	ggcccgcctg	840
ccctatgacc	cacgccacaa	ctccacagct	gtcatctcct	cccaggggga	gctctatgca	900
gccacggtca	tgcacttctc	aggtcgggac	cctgccatct	accgcagcct	gggcagtggg	960
ccaccgcttc	gcactgcccc	atataactcc	aagtggctta	atgagccaaa	cttcgtggca	1020
gcctatgata	ttgggctggt	tgcatacttc	ttcctgcggg	agaacgcagt	ggagcacgac	1080
tgtggacgca	ccgtgtactc	tcgctgggcc	cgcgtgtgca	agaatgacgt	ggggggccga	1140
ttcctgctgg	aggacacatg	gaccacattc	atgaaggccc	ggctcaactg	ctccgcgccg	1200
ggcgagggtcc	ccttctacta	taacgagctg	cagagtgcct	tccacttgcc	agagcaggac	1260
ctcatctatg	gagttttcac	aaccaacgta	aacagcatcg	cggcttctgc	tgtctgcgcc	1320
ttcaacctca	gtgctatctc	ccaggctttc	aatggcccat	ttcgctacca	ggagaacccc	1380
agggtgcct	ggctcccat	agccaacccc	atccccaatt	tccagtgtgg	caccctgcct	1440
gagaccggtc	ccaacgagaa	cctgacggag	cgcagcctgc	aggacgcgca	gcgcctcttc	1500
ctgatgagcg	aggccgtgca	gccggtgaca	cccagccct	gtgtcaccca	ggacagcgtg	1560
cgcttctcac	acctcgtggt	ggacctgggtg	caggctaaag	acacgctcta	ccatgtactc	1620
tacattggca	ccgagtcggg	caccatcctg	aaggcgctgt	ccacggcgag	ccgcagcctc	1680
cacggctgct	acctggagga	gctgcaactg	ctgccccccg	ggcgccgcga	gccccctgcg	1740
agcctgcgca	tcttgacag	cgcccgcgcg	ctcttcgtgg	ggctgagaga	cggcgtcctg	1800
cgggtcccac	tggagaggtg	cgccgcctac	cgcagccagg	gggcatgcct	gggggcccgg	1860
gacccgtact	gtggctggga	cgggaagcag	caacgttgca	gcacactcga	ggacagctcc	1920
aacatgagcc	tctggaccca	gaacatcacc	gcctgtcctg	tgcggaatgt	gacacgggat	1980
gggggcttcg	gcccattggtc	accatggcaa	ccatgtgagc	acttggtatg	ggacaactca	2040
ggctcttgcc	tgtgtcgagc	tcgatcctgt	gattccccctc	gaccccgctg	tgggggcctt	2100
gactgcctgg	ggccagccat	ccacatcgcc	aactgctcca	ggaatggggc	gtggaccccc	2160

tgggtcatcgt	gggcgctgtg	cagcacgtcc	tgtggcatcg	gcttccaggt	ccgccagcga	2220
agttgcagca	accctgctcc	ccgccacggg	ggccgcctct	gcgtgggcaa	gagccgggag	2280
gaacggttct	gtaatgagaa	cacgccttgc	ccggtgcccc	tcttctgggc	ttcctggggc	2340
tcctggagca	agtgcagcag	caactgtgga	gggggcatgc	agtcgcggcg	tcgggcctgc	2400
gagaacggca	actcctgcct	gggctgcggc	gtggagtcca	agacgtgcaa	ccccgagggc	2460
tgccccgaag	tgccggcgcaa	caccccctgg	acgccgtggc	tgcccgtgaa	cgtgacgcag	2520
ggcggggcac	ggcaggagca	gcggttccgc	ttcacctgcc	gcgcgcccct	tgcagaccgc	2580
cacggcctgc	agttcggcag	gagaaggacc	gagacgagga	cctgtcccgc	ggacggctcc	2640
ggctcctgcg	acaccgacgc	cctggtggag	gtcctcctgc	gcagcgggag	cacctccccg	2700
cacacggtga	gcgggggctg	ggccgcctgg	ggcccgtggt	cgtcctgctc	ccgggactgc	2760
gagctgggct	tccgcgtccg	caagagaacg	tgactaacc	cggagccccg	caacgggggc	2820
ctgccctgcg	tgggcgatgc	tgccgagtac	caggactgca	acccccaggc	ttgccaggtt	2880
cggggtgctt	ggtcctgctg	gacctcatgg	tctccatgct	cagcttcctg	tgggtggggg	2940
cactatcaac	gcacccggtt	ctgcaccagc	cccgaccctt	ccccaggtga	ggacatctgt	3000
ctcgggctgc	acacggagga	ggcactatgt	gccacacagg	cctgcccaga	aggtgtgtcg	3060
ccctggtctg	agtggagtaa	gtgactgac	gacggagccc	agagccgaag	ccggcactgt	3120
gaggagcttc	tcccagggtc	cagcgcmgtg	gctggaaaca	gcagccagag	ccgcccctgc	3180
ccctacagcg	agattcscgt	catcctgcca	gcctccagca	tggaggaggc	caccgactgt	3240
gcagggttca	atctcatcca	cttgggtggc	acgggcatct	cctgcttctt	gggctctggg	3300
ctcctgacct	tagcagtgtg	cctgtcttgc	cagcactgcc	agcgtcagtc	ccaggagtcc	3360
acactggtcc	atcctgccac	ccccaacctt	ttgactaca	agggcgagg	caccccgaa	3420
aatgaaaagt	acacacccat	ggaattcaag	accctgaaca	agaataactt	gatccctgat	3480
gacagagcca	acttctaccc	attgcagcag	accaatgtgt	acacgactac	ttactaccca	3540
agccccctga	acaaacacag	cttccggccc	gaggcctcac	ctggacaacg	gtgcttcccc	3600
aacagctgat	accgccgtcc	tggggacttg	ggcttcttgc	cttcataagg	cacagagcag	3660
atggagatgg	gacagtggag	ccagtttggt	tttctccctc	tgactaggc	caagaacttg	3720
ctgccttgcc	tgtggggggt	cccatccggc	ttcagagagc	tctggctggc	attgaccatg	3780
ggggaaagg	ctggtttcag	gctgacatat	ggccgcaggt	ccagttcagc	ccaggctctmt	3840
catggttatc	ttccaaccca	ctgtcacgct	gacactatgc	tgccatgcct	gggctgtgga	3900
cctactgggc	atttgaggaa	ytggagaatg	gagatggcaa	gagggcaggc	ttttaagttt	3960
gggttgagga	caacttcctg	tggccccac	aagctgagtc	tggccttctc	cagctggccc	4020
caaaaaaggc	ctttgctaca	tcctgattat	ctctgaaagt	aatcaatcaa	gtggctccag	4080
tagctctgga	ttttctgcca	gggctggggc	attgtggtgc	tgccccagta	tgacatggga	4140
ccaaggccag	cgcaggttat	ccacctctgc	ctggaagtct	atactctacc	cagggcatcc	4200
ctctggtcag	aggcagttag	tactgggaac	tggaggctga	cctgtgctta	gaagtccttt	4260
aatctgggct	ggtagaggcc	tcagccttgc	cctcaatgca	cgaagggtgg	cccaggagag	4320
aggatcaatg	ccataggagg	cagaagtctg	gcctctgtgc	ctctatggag	actatcttcc	4380
agttgctgct	caacagagtt	gttggtgtag	acctgcttgg	gagtctctgc	tggcccttca	4440
tctgttcagg	aacacacaca	cacacacact	cacacacgca	cacacaatca	caatttgcta	4500
cagcaacaaa	aaagacattg	ggctgtggca	ttattaatta	aagatgatat	ccagtcaaaa	4560
aaaaact						4567

<210> 2

<211> 453

<212> DNA

<213> Homo sapiens

<400> 2

agtaatcagc	tcgggtaccgg	catgtgctgt	agccagcgca	ggttatccac	ctctgcctgg	60
aagctctatac	tctaccaggg	gcatccctct	ggtcagaggc	agtgagtact	gggaactgga	120
ggctgacctg	tgcttagaag	tcctttaatc	tgggctggta	caggcctcag	ccttgccctc	180
aatgcacgaa	aggtggccca	ggagagagga	tcaatgccat	aggaggcaga	agtctggcct	240
ctgtgcctct	atggagacta	tcttccagtt	gctgctcaac	agagttgttg	gctgagacct	300
gcttgggagt	ctctgctggc	ccttcatctg	ttcaggaaca	cacacacaca	cacactcaca	360
cacgcacaca	caatcacaat	ttgctacagc	aacaaaaaag	acattggggct	gtggcattat	420
taattaaaga	tgatatccag	tcaaaaaaaa	act			453

<210> 3

<211> 4675

<212> DNA

<213> Homo sapiens

<400> 3

gcggccgccc	cattcccaga	ccggccgcca	gcccattctgg	ttagctcccg	ccgctccgcg	60
ccgcccggga	gtcgggagcc	gcggggaacc	gggcacctgc	acccgcctct	gggagtgagt	120
ggttccagct	ggtgcctggc	ctgtgtctct	tggatgccct	gtggcttcag	tccgtctcct	180
gttgcccacc	acctcgtccc	tgggcccgcct	gataccccag	cccaacagct	aagggtgtga	240
tggacagttag	ggggctggct	tctctcactg	gtcaggggca	ggaagccaag	tggagacttt	300
gaattggaggc	aaggatggag	gggacctggg	gaagaggact	ggcctgaatc	accttcccca	360
aaggctctca	tggactgagc	tggaggtctt	ctccccgtgc	tgctcccg	agctaggact	420
gcagaggggc	ctatcatggt	gcttgaggc	ccccgtgctg	tctcgctgtt	gctgcccagc	480
ctcacactgc	tgggtgtcca	cctctccagc	tcccaggatg	tctccagtga	gcccagcagt	540
gagcagcagc	tgtgcgcct	tagcaagcac	cccaccgtgg	cctttgaaga	cctgcagccg	600
tgggtctcta	acttcacct	ccctggagcc	cgggatttct	cccagctggc	tttggacccc	660
tccgggaacc	agctcatcgt	gggagccagg	aactacctct	tcagactcag	ccttgccaat	720
gtctctcttc	ttcaggccac	agagtgggcc	tccagtgagg	acacgcgcg	ctcctgcca	780
agcaaaaggga	agactgagga	ggagtgtcag	aactacgtgc	gagtcctgat	cgtcgccggc	840
cggaaaggtgt	tcatgtgtgg	aaccaatgcc	ttttcccca	tgtgcaccag	cagacaggtg	900
gggaacctca	gccggactac	tgagaagatc	aatggtgtgg	cccgtgccc	ctatgaccca	960
cgcacaact	ccacagctgt	catctcctcc	cagggggagc	tctatgcagc	cacggtcatc	1020
gacttctcag	gtcgggaccc	tgccatctac	cgcagcctgg	gcagtgggcc	accgcttcgc	1080
actgcccaat	ataactccaa	gtggcttaat	gagccaaact	tcgtggcagc	ctatgatatt	1140
gggctgtttg	catacttctt	cctgcgggag	aacgcagtgg	agcacgactg	tggacgcacc	1200
gtgtactctc	gcggtggccc	cgtgtgcaag	aatgacgtgg	ggggccgatt	cctgctggag	1260
gacacatgga	ccacattcat	gaaggcccgg	ctcaactgct	cccggcccggg	cgaggtcccc	1320
ttctactata	acagctgcga	gagtgccttc	cacttgccag	agcaggacct	catctatgga	1380
gttttcacaa	ccaactgaaa	cagcatcgcg	gcttctgctg	tctgcgcctt	caacctcagt	1440
gctatctccc	aggctttcaa	tggcccattt	cgctaccagg	agaaccccag	ggctgcctgg	1500
ctccccatag	ccaaccccat	ccccaatctt	cagtgtggca	ccctgcctga	gaccggtccc	1560
aacgagaacc	tgacggagcg	cagcctgcag	gacgcgcagc	gcctcttcct	gatgagcgag	1620
gccgtgcagc	cggtagaccc	cgagccctgt	gtcaccagc	acagcgtgcg	cttctcacac	1680
ctcgtggtgg	acctggtgca	ggctaaagac	acgctctacc	atgtactcta	cattggcacc	1740
gagtcgggca	ccatcctgaa	ggcgtgttcc	acggcgagcc	gcagcctcca	cggctgctac	1800
ctggaggagc	tgcacgtgct	gccccccggg	cgcgcgcagc	ccctgcgcag	cctgcgcac	1860
ctgcacagcg	cccgcgcgct	cttcgtgggg	ctgagagacg	gcgtcctgcg	ggtcccactg	1920
gagaggtgcg	ccgcctaccg	cagccagggg	gcatgcctgg	gggcccggga	cccgtactgt	1980
ggctgggacg	ggaagcagca	acgttgagc	acactcgagg	acagctccaa	catgagcctc	2040
tggaccagga	acatcaccgc	ctgtcctgtg	cggaatgtga	cacgggatgg	gggcttcggc	2100
ccatggtcac	catggcaacc	atgtgagcac	ttggatgggg	acaactcagg	ctcttgccctg	2160
tgtcgagctc	gatcctgtga	ttccccctga	ccccgctgtg	ggggcccttga	ctgcctgggg	2220
ccagccatcc	acatcgccaa	ctgctccagg	aatggggcgt	ggaccccgtg	gtcatcgtgg	2280
gcgctgtgca	gcacgtcctg	tggcatcggc	ttccagggtcc	gccagcgaag	ttgcagcaac	2340
cctgctcccc	gccacggggg	ccgcactctg	gtgggcaaga	gccgggagga	acggttctgt	2400
aatgagaaca	cgccttgccc	ggtgcccctc	ttctgggctt	cctggggctc	ctggagcaag	2460
tgcagcagca	actgtggagg	gggcatgcag	tcgcggcgct	gggcctgcga	gaacggcaac	2520
tcctgcctgg	gctgcggcgt	ggagtccaag	acgtgcaacc	ccgagggtg	ccccgaagtg	2580
cggcgcaaca	ccccctggac	gccgtggctg	cccgtgaacg	tgacgcaggg	cggggcacgg	2640
caggagcagc	ggttccgctt	cacctgcgc	gcgccccttg	cagaccgcga	cggcctgcag	2700
ttcggcagga	gaaggaccga	gacgaggacc	tgtcccgcgg	acggctccgg	ctcctgcgac	2760
accgacgccc	tgggtggaggt	cctcctgcgc	agcgggagca	cctccccgca	cacggtgagc	2820
gggggtgtgg	cgccctgggg	cccgtggtcg	tctgtctccc	gggactgcga	gctgggcttc	2880
cgcgtccgca	acgaaacgtg	cactaaccgc	gagcccgcga	acgggggcct	gccctgcgtg	2940
ggcgtgctg	ccgagtacca	ggactgcaac	ccccaggctt	gcccagttcg	gggtgcttgg	3000
tcctgctgga	cctcatggtc	tccatgctca	gcttctgtg	gtgggggtca	ctatcaacgc	3060
acccgttct	gcaccagccc	cgcaccctcc	ccagggtgag	acatctgtct	cgggctgcac	3120
acggaggagg	cactatgtgc	cacacaggcc	tgccagaag	gctggtcgcc	ctggtctgag	3180
tggagtaagt	gcaactgacga	cggagcccag	agccgaagcc	ggcactgtga	ggagctcctc	3240
ccagggtcca	gcgcmgtg	tggaaacagc	agccagagcc	gcccctgccc	ctacagcgag	3300
attcscgtca	tcctgccagc	ctccagcatg	gaggaggcca	ccgactgtgc	agggttcaat	3360
ctcatccact	tgggtggccac	gggcatctcc	tgttcttgg	gctctgggct	cctgacccta	3420

gcagtgtacc	tgtcttgcca	gcactgccag	cgtcagtcac	aggagtccac	actggtccat	3480
cctgccaccc	ccaaccattt	gcactacaag	ggcgaggcca	ccccgaagaa	tgaaaagtac	3540
acacccatgg	aattcaagac	cctgaacaag	aataacttga	tccttgatga	cagagccaac	3600
ttctacccat	tgcagcagac	caatgtgtac	acgactactt	actacccaag	ccccctgaac	3660
aaacacagct	tccggcccga	ggcctcacct	ggacaacggt	gcttcccaa	cagctgatac	3720
cgccgtcctg	gggacttggg	cttcttgctt	tcataaggca	cagagcagat	ggagatggga	3780
cagtggagcc	agtttggttt	tctccctctg	cactaggcca	agaacttgct	gccttgcttg	3840
tggggggtcc	catccggctt	cagagagctc	tggctggcat	tgaccatggg	ggaaagggct	3900
ggtttcaggc	tgacatatgg	cgcaggtcc	agttcagccc	aggtctmtca	tggttatctt	3960
ccaacccact	gtcacgctga	cactatgctg	ccatgcctgg	gctgtggacc	tactgggcat	4020
ttgaggaayt	ggagaatgga	gatggcaaga	gggcaggcct	ttaagtttgg	gttgagaca	4080
acttcctgtg	gccccacaa	gctgagtctg	gccttctcca	gctggcccca	aaaaaggcct	4140
ttgctacatc	ctgattatct	ctgaaagtaa	tcaatcaagt	ggctccagta	gctctggatt	4200
ttctgccagg	gctgggccat	tgtggtgctg	ccccagtatg	acatgggacc	aaggccagcg	4260
caggttatcc	acctctgcct	ggaagtctat	actctaccca	gggcatccct	ctggctcagag	4320
gcagtgahta	ctgggaactg	gaggtgacc	tgtgcttaga	agtcctttaa	tctgggcttg	4380
tacaggcctc	agccttgccc	tcaatgcacg	aaaggtggcc	caggagagag	gatcaatgcc	4440
ataggaggca	gaagtctggc	ctctgtgcct	ctatggagac	tatcttccag	ttgctgctca	4500
acagagttgt	tggctgagag	ctgcttggga	gtctctgctg	gcccttcac	tggtcaggaa	4560
cacacacaca	cacacactca	cacacgcaca	cacaatcaca	atttgctaca	gcaacaaaaa	4620
agacattggg	ctgtggcatt	attaattaaa	gatgatattc	agtcaaaaaa	aaact	4675

<210> 4

<211> 4731

<212> DNA

<213> Homo sapiens

<400> 4

attggagatg	ctcgggggca	ggctgccgag	ttgtgtcctg	cttttctgag	gccagaccaa	60
gccgtctgga	gctgctgggc	aggttttctt	gctgacctca	cctgaccaca	gtggcctggg	120
tggactctac	agggaaatgt	tgttttctcc	ctgggagcag	tagcagcagt	cctggctccc	180
ctggactgag	aactcctcat	cagccccagg	aagcccgagc	cccctttcag	ggatctggaa	240
ccggtgtgcc	tgtggcccca	ggtctgtctc	caggcgtggg	ctgaagtcct	gacttctgtc	300
gctgggggca	aggagtggga	gagccagctg	gctgcctggg	ctttggcaga	cagcaggctg	360
atgggtgctg	cttccccgag	actgcttctc	ctgcctgctg	tctgatttcc	ctgcatggtg	420
cccgagctg	agctgctacg	ggtcttctcc	cctgtctgcc	tcccggagct	aggactgcag	480
aggggcctat	catggtgctt	gcaggccccc	tggctgtctc	gctgttgetg	cccagcctca	540
cactgctggt	gtcccacctc	tccagctccc	aggatgtctc	cagtgagccc	agcagtgagc	600
agcagctgtg	cgcccttagc	aagcacccca	ccgtggcctt	tgaagacctg	cagccgtggg	660
tctctaactt	cacctaccct	ggagcccggg	atttctccca	gctggctttg	gacccctccg	720
ggaaccagct	catcgtggga	gccaggaact	acctcttcag	actcagcctt	gccaatgtct	780
ctcttcttca	ggccacagag	tgggcctcca	gtgaggacac	gcgccgctcc	tgccaaagca	840
aagggaagac	tgaggaggag	tgtcagaact	acgtgcagat	cctgacgctc	gccggccgga	900
aggtgttcat	gtgtggaacc	aatgcctttt	cccccatgtg	caccagcaga	caggtgggga	960
acctcagccg	gactactgag	aagatcaatg	gtgtggcccg	ctgcccctat	gacccacgcc	1020
acaactccac	agctgtcatc	tcctcccagg	gggagctcta	tgcagccacg	gtcatcgact	1080
tctcaggtcg	ggaccctgcc	atctaccgca	gcctgggcag	tgggccaccg	cttcgcactg	1140
cccaatataa	ctccaagtgg	cttaatgagc	caaacttcgt	ggcagcctat	gatattgggc	1200
tgtttgcata	cttcttctctg	cgggagaacg	cagtggagca	cgactgtgga	cgcaccgtgt	1260
actctcgcgt	ggcccgcgtg	tgcaagaatg	acgtgggggg	ccgattcctg	ctggaggaca	1320
catggaccac	attcatgaag	gcccggtcta	actgctcccc	cccgggcgag	gtccccttct	1380
actataacga	gttcagagat	gccttccact	tgccagagca	ggacctcatc	tatggagtgt	1440
tcacaaccaa	cgtaaacagc	atcgcggttt	ctgctgtctg	cgcttcaaac	ctcagtgcta	1500
tctcccaggc	tttcaatggc	ccatttctgt	accaggagaa	ccccagggct	gcctggctcc	1560
ccatagccaa	ccccatcccc	aatttccagt	gtggcaccct	gcctgagacc	ggtcccaacg	1620
agaacctgac	ggagcgcagc	ctgcaggacg	cgcagcgcct	cttctgatg	agcgaggccg	1680
tgcagccggt	gacacccgag	ccctgtgtca	cccaggacag	cgtgcgcttc	tcacacctcg	1740
tgggtgacct	ggtgcaggct	aaagacacgc	tctacatgt	actctacatt	ggcaccgagt	1800
cgggcaccat	cctgaaggcg	ctgtccacgg	cgagccgcag	cctccacggc	tgctacctgg	1860
aggagctgca	cgtgctgccc	cccgggcgcc	gcgagccctt	gcgagcctg	cgcactcctg	1920

acagcgcccc	cgcgctcttc	gtggggctga	gagacggcgt	cctgcgggtc	ccactggaga	1980
ggtgcgcccc	ctaccgcagc	cagggggcat	gcctgggggc	ccgggacccg	tactgtggct	2040
gggacgggaa	gcagcaacgt	tgcagcacac	tcgaggacag	ctccaacatg	agcctctgga	2100
cccagaacat	caccgcctgt	cctgtgcgga	atgtgacacg	ggatgggggc	ttcggcccat	2160
ggtcaccatg	gcaaccatgt	gagcacttgg	atggggacaa	ctcaggctct	tgctgtgtgc	2220
gagctcgatc	ctgtgattcc	cctcgacccc	gctgtggggg	ccttgactgc	ctggggccag	2280
ccatccacat	cgccaactgc	tccaggaatg	gggctgggac	cccgtggtca	tcgtgggcgc	2340
tgtgcagcac	gtcctgtggc	atcggcttcc	aggtccgcca	gcgaagtgtc	agcaaccctg	2400
ctccccgcca	cggggggcgc	atctgcgtgg	gcaagagccg	ggaggaacgg	ttctgtaatg	2460
agaacacgcc	ttgcccgggtg	cccatcttct	gggcttctctg	gggctcctgg	agcaagtgca	2520
gcagcaactg	tggagggggc	atgcagtgcg	ggcgtcgggc	ctgcgagaac	ggcaactcct	2580
gcctgggctg	cggcgtggag	ttcaagacgt	gcaaccccgga	gggctgcccc	gaagtgcggc	2640
gcaacacccc	ctggacgcgg	tggctgcccc	tgaacgtgac	gcagggcggg	gcacggcagg	2700
agcagcgggt	ccgcttcacc	tgccgcgcgc	cccttgacaga	cccgcacggc	ctgcagttcg	2760
gcaggagaag	gaccgagacg	aggacctgtc	ccgcggacgg	ctccggctcc	tgcgacacccg	2820
acgccctggg	ggaggctcct	ctgcgcagcg	ggagcacctc	cccgcacacg	gtgagcgggg	2880
gctggggcgc	ctggggcccc	tggctcgtcct	gctcccggga	ctgcgagctg	ggcttcgcgc	2940
tcgcgaagag	aacgtgcact	aacccggagc	cccgaacgg	gggcctgccc	tgctgtggcg	3000
atgctgccga	gtaccaggac	tgaaccccc	aggcttgccc	agttcggggg	gcttggctcct	3060
gctggacctc	atggtctcca	tgtcagctt	cctgtggtgg	gggtcactat	caacgcaccc	3120
gttctcgcac	cagccccgca	ccctccccag	gtgaggacat	ctgtctcggg	ctgcacacgg	3180
aggaggcact	atgtgccaca	caggcctgcc	cagaaggctg	gtcgccctgg	tctgagtggga	3240
gtaagtgcac	tgacgacgga	gcccagagcc	gaagccggca	ctgtgaggag	ctcctcccag	3300
ggtccagcgc	mtgtgctgga	aacagcagcc	agagccgccc	ctgcccctac	agcgagattc	3360
scgtcatcct	ggcagcctcc	agcatggagg	aggccaccga	ctgtgcaggg	ttcaatctca	3420
tccacttggg	ggccacgggc	atctcctgct	tcttgggctc	tgggctcctg	accctagcag	3480
tgtacctgtc	ttgccagcac	tgccagcgtc	agtcccagga	gtccacactg	gtccatcctg	3540
ccacccccaa	ccatttgac	tacaagggcg	gaggcacccc	gaagaatgaa	aagtacacac	3600
ccatggaatt	caagaccctg	aacaagaata	acttgatccc	tgatgacaga	gccaaacttct	3660
acccattgca	gcagaccaat	gtgtacacga	ctacttacta	cccaagcccc	ctgaacaaac	3720
acagcttccg	gcccagaggcc	tcacctggac	aacggtgctt	ccccaacagc	tgataccgcc	3780
gtcctgggga	cttgggcttc	ttgccttcat	aaggcacaga	gcagatggag	atgggacagt	3840
ggagccagtt	tggttttctc	cctctgcact	aggccaagaa	cttgctgctc	tgctgtggg	3900
gggtcccatc	atgcttcaga	gagctctggc	tggcattgac	catgggggaa	agggctggtt	3960
tcaggctgac	atatggccgc	aggctccagtt	cagcccagggt	ctmtcatggg	tatcttccaa	4020
cccactgtca	cgctgacact	atgctgccat	gcctgggctg	tggacctact	gggcatttga	4080
ggaaytgag	aatggagatg	gcaagagggc	aggcttttaa	gtttggggtg	gagacaactt	4140
cctgtggccc	ccacaagctg	agtctggcct	tctccagctg	gccccaaaaa	aggcctttgc	4200
tacatcctga	ttatctctga	aagtaataca	tcaagtggct	ccagtagctc	tggattttct	4260
gccagggctg	ggccattgtg	gtgctgcccc	agtatgacat	gggaccaagg	ccagcgcagg	4320
ttatccacct	ctgcctggaa	gtctatactc	taccaggggc	atccctctgg	tcagaggcag	4380
tgagtactgg	gaactggagg	ctgacctgtg	cttagaagtc	ctttaatctg	ggctggtaca	4440
ggcctcagcc	ttgccctcaa	tgcacgaaag	gtggcccagg	agagaggatc	aatgcccatag	4500
gaggcagaag	tctggcctct	gtgcctctat	ggagactatc	ttccagttgc	tgctcaacag	4560
agttgttggc	tgagacctgc	ttgggagtct	ctgctggccc	ttcatctgtt	caggaacaca	4620
cacacacaca	cactcacaca	cgcacacaca	atcacaattt	gctacagcaa	caaaaaagac	4680
attgggctgt	ggcattatta	attaaagatg	atatccagtc	aaaaaaaaac	t	4731

<210> 5
 <211> 4703
 <212> DNA
 <213> Homo sapiens

<400> 5						
gcggccgccc	cattcccaga	ccggccgcca	gcccattctg	ttagctcccg	ccgctccgcg	60
ccgcccggga	gtcgggagcc	gcggggaacc	gggcacctgc	acccgcctct	gggagccagc	120
ttgggtccgg	gttgcaactg	gccctgccag	ggctgtgggtc	ggcgcatctg	ggctgcagcg	180
gcgatgggga	ccggggaccc	aggcctggag	aaggagacgg	acgagtgagg	ctgagggacg	240
gaggacaga	gtgagtgggt	ccagctgggt	cctggcctgt	gtctcttgga	tgccctgtgg	300
cttcagtcgg	tctcctgttg	cccaccacct	cgtccctggg	ccgcctgata	ccccagccca	360

acagctaagg	tgtggatgga	cagtaggggg	ctggcttctc	tcaactgggtca	ggggtcttct	420
cccctgtctg	cctcccgag	ctaggactgc	agaggggcct	atcatgggtgc	ttgcaggccc	480
cctggctgtc	tcgctgttgc	tgcccagcct	cacactgctg	gtgtcccacc	tctccagctc	540
ccaggatgtc	tccagtgagc	ccagcagtga	gcagcagctg	tgcgccctta	gcaagcacc	600
caccgtggcc	tttgaagacc	tgcagccgtg	ggtctctaac	ttcacctacc	ctggagccc	660
ggatttctcc	cagctggctt	tggacccctc	cgggaaccag	ctcatcgtgg	gagccaggaa	720
ctacctcttc	agactcagcc	ttgccaatgt	ctctcttctt	caggccacag	agtgggcctc	780
cagtggagac	acgcgcgcgt	cctgccaaag	caaagggaag	actgaggagg	agtgtcagaa	840
ctacgtgcga	gtcctgatcg	tcgcgcggccg	gaaggtgttc	atgtgtggaa	ccaatgcctt	900
ttcccccatg	tgcaccagca	gacagggtggg	gaacctcagc	cggactactg	agaagatcaa	960
tgggtgtggcc	cgctgcccct	atgaccacag	ccacaactcc	acagctgtca	tctcctccca	1020
gggggagctc	tatgcagcca	cggtcatcga	cttctcaggt	cgggaccctg	ccatctaccg	1080
cagcctgggc	agtgggccc	cgcttcgcac	tgcccaatat	aactccaagt	ggcttaatga	1140
gccaaacttc	gtggcagcct	atgatattgg	gctgtttgca	tacttcttcc	tgcgggagaa	1200
cgcagtggag	cacgactgtg	gacgcaccgt	gtactctcgc	gtggcccgcg	tgtgcaagaa	1260
tgacgtgggg	ggcgcattcc	tgctggagga	cacatggacc	acattcatga	aggcccggct	1320
caactgctcc	cgcccgggcg	aggccccctt	ctactataac	gagctgcaga	gtgccttcca	1380
cttgccagag	caggacctca	tctatggagt	tttcacaacc	aacgtaaaca	gcatcgccgc	1440
ttctgctgtc	tgcgccttca	acctcagtgc	tatctcccag	gctttcaatg	gcccatttccg	1500
ctaccaggag	aaccccaggg	ctgcctggct	ccccatagcc	aaccccatcc	ccaatttcca	1560
gtgtggcacc	ctgcctgaga	ccggtcccaa	cgagaacctg	acggagcgca	gcctgcagga	1620
cgcgacgcgc	ctcttcctga	tgagcgaggc	cgtgcagccg	gtgacaccgc	agccctgtgt	1680
cacccaggac	agcgtgcgct	tctcacacct	cgtggtggac	ctggtgcagg	ctaaagacac	1740
gctctaccat	gtactctaca	ttggcaccga	gtcgggcacc	atcctgaagg	cgctgtccac	1800
ggcgagccgc	agcctccacg	gctgctacct	ggaggagctg	cacgtgctgc	ccccggggcg	1860
ccgcgagccc	ctgcgcagcc	tgcgcacctt	gcacagcgcc	cgcgcgctct	tcgtggggct	1920
gagagacggc	gtcctgcggg	tcccactgga	gaggtgcgcc	gcctaccgca	gccagggggc	1980
atgcctgggg	gcccgggacc	cgtactgtgg	ctgggacggg	aagcagcaac	gttgcagcac	2040
actcgaggac	agctccaaca	tgagcctctg	gaccagaac	atcaccgcct	gtcctgtgcg	2100
gaatgtgaca	cgggatgggg	gcttcggccc	atggtcacca	tggcaaccat	gtgagcactt	2160
ggatggggac	aactcaggct	cttgccctgtg	tcgagctcga	tcctgtgatt	cccctcgacc	2220
ccgctgtggg	ggccttgact	gcctggggcc	agccatccac	atcgccaaat	gtccagggaa	2280
tggggcgctg	accccggtgt	catcggtggc	gctgtgcagc	acgtcctgtg	gcatcggtct	2340
ccaggtccgc	cagcgaagt	gcagcaacc	tgtccccgc	cacgggggcc	gcatctgcgt	2400
gggcaagagc	cgggaggaac	ggttctgtaa	tgagaacacg	ccttgcccg	tgcccatctt	2460
ctgggcttcc	tggggctcct	ggagcaagt	cagcagcaac	tgtggagggg	gcatgcagtc	2520
gcggcgctcg	gcctgcgaga	acggcaactc	ctgcctgggc	tgcggcgctg	agttcaagac	2580
gtgcaacccc	gagggctgcc	ccgaagtgcg	gcgcaacacc	ccctggacgc	cgtggctgcc	2640
cgtgaacgtg	acgcagggcg	gggcacggca	ggagcagcg	ttccgcttca	cctgccgcgc	2700
gccccttgca	gacccgcacg	gcctgcagtt	cggcaggaga	aggaccgaga	cgaggacctg	2760
tcccgcgac	ggctccggct	cctgcgacac	cgacgccttg	gtggagggtc	tcttgcgcag	2820
cgggagcacc	tccccgcaca	cggtgagcgg	gggctggggc	gcctggggcc	cgtggtcgct	2880
ctgctcccgc	gactgcgagc	tgggcttccg	cgtccgcgac	agaacgtgca	ctaaccggga	2940
gcccgcgaac	ggggcgctgc	cctgcgtggg	cgatgctgac	gagtaaccag	actgcaaccc	3000
ccaggcttgc	ccagttcggg	gtgcttggtc	ctgctggacc	tcattggtctc	catgctcagc	3060
ttcctgtggt	gggggtcact	atcaacgcac	ccgttctctg	accagccccg	caccctcccc	3120
aggtgaggac	atctgtctcg	ggctgcacac	ggaggaggca	ctatgtgcca	cacaggcctg	3180
cccagaaggc	tggctgcctt	ggtctgagtg	gagtaagtgc	actgacgacg	gagcccagag	3240
ccgaagccgg	cactgtgagg	agctcctccc	agggctccagc	gcmgtgtgctg	gaaacagcag	3300
ccagagccgc	ccctgcccct	acagcgagat	tcscgtcatt	ctgccagcct	ccagcatgga	3360
ggaggccacc	gactgtgcag	ggttcaatct	catccacttg	gtggccacgg	gcatctcctg	3420
cttcttgggc	tctgggtccc	tgaccctagc	agtgtacctg	tcttgccagc	actgccagcg	3480
tcagtcccag	gagtccacac	tggtecatcc	tgccaccccc	aaccatttgc	actacaaggg	3540
cggaggcacc	ccgaagaatg	aaaagtacac	acccatggaa	ttcaagaccc	tgaacaagaa	3600
taacttgatc	cctgatgaca	gagccaactt	ctacccattg	cagcagacca	atgtgtacac	3660
gactacttac	tacccaagcc	ccctgaacaa	acacagcttc	cggcccagag	cctcacctgg	3720
acaacgggtg	ttccccaaca	gctgataccg	ccgtcctggg	gacttgggct	tcttgccctc	3780
ataaggcaca	gagcagatgg	agatgggaca	gtggagccag	tttggttttc	tccctctgca	3840
ctaggccaag	aacttgctgc	cttgccctgtg	gggggtccca	tccggcttca	gagagctctg	3900
gctggcattg	accatggggg	aaagggtctg	tttcaggctg	acatatggcc	gcaggtccag	3960
ttcagcccag	gtctmtcatg	gttatcttcc	aacccactgt	cacgctgaca	ctatgctgcc	4020

atgcctgggc	tgtggacctt	ctggggcattt	gaggaaytgg	agaatggaga	tggcaagagg	4080
gcaggctttt	aagtttgggt	tggagacaac	ttcctgtggc	ccccacaagc	tgagtctggc	4140
cttctccagc	tggcccaaaa	aaaggccttt	gctacatcct	gattatctct	gaaagtaatc	4200
aatcaagtgg	ctccagtagc	tctggatttt	ctgccagggc	tgggccattg	tgggtgctgcc	4260
ccagtatgac	atgggacca	ggccagcgca	ggttatccac	ctctgcctgg	aagtctatac	4320
tctacccagg	gcattccctct	ggtcagaggc	agtgaagtact	gggaactgga	ggctgacctg	4380
tgcttagaag	tcctttaatc	tgggctggta	caggcctcag	ccttgccctc	aatgcacgaa	4440
aggtggccca	ggagagagga	tcaatgccat	aggaggcaga	agtctggcct	ctgtgcctct	4500
atggagacta	tcttccagtt	gctgctcaac	agagttgttg	gctgagacct	gcttgggagt	4560
ctctgctggc	ctttcatctg	ttcaggaaca	cacacacaca	cacactcaca	cacgcacaca	4620
caatcacaa	ttgtacagc	aacaaaaaag	acattgggct	gtggcattat	taattaaaga	4680
tgatatccag	tcaaaaaaaa	act				4703

<210> 6
 <211> 4405
 <212> DNA
 <213> Homo sapiens

<400> 6

gcggccgccc	cattcccaga	ccggccgcca	gcccattctgg	ttagctcccg	ccgctccgcg	60
ccgcccggga	gtcgggagcc	gcggggaacc	gggcacctgc	acccgcctct	gggaggtctt	120
ctcccctgtc	tgccctcccg	agctaggact	gcagaggggc	ctatcatggg	gcttgacaggc	180
cccctggttg	tctcgtgtt	gctgcccagc	ctcacactgc	tgggtgtcca	cctctccagc	240
tcccaggatg	tctccagtga	gccagcagc	gagcagcagc	tgtgcgcctt	tagcaagcac	300
cccaccgttg	cctttgaaga	cctgcagccg	tgggtctcta	acttcacctt	ccctggagcc	360
cgggatttct	ccagctggc	tttggacccc	tccgggaacc	agctcatcgt	gggagccagg	420
aactacctct	tcagactcag	ccttgccaat	gtctctcttc	ttcaggccac	agagtggggc	480
tccagtgagg	acacgcgccc	ctcctgccaa	agcaaaggga	agactgagga	ggagtgtcag	540
aactacgtgc	gagtcctgat	cgctgcgggc	cggaaggtgt	tcatgtgtgg	aaccaatgcc	600
ttttccccc	tgtgcaccag	cagacagggtg	gggaacctca	gccggactac	tgagaagatc	660
aatggtgtgg	cccgtgccc	ctatgaccca	cgccacaact	ccacagctgt	catctcctcc	720
cagggggagc	tctatgcagc	cacggtcatc	gacttctcag	gtcgggaccc	tgccatctac	780
cgcagcctgg	gcagtggggc	accgcttcgc	actgcccact	ataactccaa	gtggcttaat	840
gagccaaact	tcgtggcagc	ctatgatatt	gggtctgttg	catacttctt	cctgcgggag	900
aacgcagtg	agcacgactg	tggacgcacc	gtgtactctc	gcgtggcccg	cgtgtgcaag	960
aatgacgtgg	ggggccgatt	cctgctggag	gacacatgga	ccacattcat	gaaggcccgg	1020
ctcaactgct	cccggccggg	cgaggtcccc	ttctactata	acgagctgca	gagtgccttc	1080
cacttgccag	agcaggacct	catctatgga	gttttcacaa	ccaacgtaaa	cagcatcgcg	1140
gcttctgctg	tctgcgcctt	caacctcagt	gctatctccc	aggctttcaa	tggcccattt	1200
cgctaccagg	agaaccccag	ggctgcctgg	ctccccatag	ccaaccccat	cccccaatttc	1260
cagtgtggca	ccctgcctga	gaccgggtccc	aacgagaacc	tgacggagcg	cagcctgcag	1320
gacgcgcagc	gcctcttcct	gatgagcag	gccgtgcagc	cgggtgacacc	cgagccctgt	1380
gtcaccagag	acagcgtgcg	cttctcacac	ctcgtgggtg	acctggtgca	ggctaaagac	1440
acgctctacc	atgtactcta	cattggcacc	gagtcgggca	ccatcctgaa	ggcgtgttcc	1500
acggcgagcc	gcagcctcca	cggctgctac	ctggaggagc	tgacagtgtt	gccccccggg	1560
cgcgcgcagc	ccctgcgcag	cctgcgcctc	ctgcacagcg	cccgcgcgct	cttcgtgggg	1620
ctgagagacg	gcgtcctgcg	ggtcccactg	gagaggtgcg	ccgcctaccg	cagccagggg	1680
gcatgcctgg	gggcccggga	cccgtactgt	ggctgggacg	ggaagcagca	acgttgacagc	1740
acactcgagg	acagctccaa	catgagcctc	tggacccaga	acatcaccgc	ctgtcctgtg	1800
cggaatgtga	cacgggatgg	gggcttcggc	ccatgggtcac	catggcaacc	atgtgagcac	1860
ttggatgggg	acaactcagg	ctcttgctgt	tgtcgagctc	gatcctgtga	ttcccctcga	1920
ccccgtgtgt	ggggccttga	ctgcccgggg	ccagccatcc	acatcgccaa	ctgctccagg	1980
aatggggcgt	ggaccccgtg	gtcatcgtgg	gcgtgtgtga	gcacgtcctg	tggcatcggc	2040
ttccaggtcc	gccagcgaag	ttgcagcaac	cctgctcccc	gccacggggg	ccgcatctgc	2100
gtgggcaaga	gccgggagga	acggttctgt	aatgagaaca	cgccttgccc	ggtgcccctc	2160
ttctgggctt	cctggggctc	ctggagcaag	tgacgacgca	actgtggagg	gggcatgcag	2220
tcgcggcgtc	gggcctgcga	gaacggcaac	tcctgcctgg	gctgcggcgt	ggagtccaag	2280
acgtgcaacc	ccgagggctg	ccccgaagtg	cggcgcaaca	ccccctggac	gccgtggctg	2340
cccgtgaacg	tgacgcaggg	cggggcacgg	caggagcagc	ggttccgctt	cacctgccgc	2400
gcgccccttg	cagaccgcga	cggcctgcag	ttcggcagga	gaaggaccga	gacgaggacc	2460

tgccccgcgg	acggctccgg	ctcctgcgac	accgacgccc	tggtggaggt	cctcctgcgc	2520
agcgggagca	cctccccgca	cacggtgagc	gggggctggg	ccgcctgggg	cccgtggtcg	2580
tcctgctccc	gggactgcga	gctgggcttc	cgcgtccgca	agagaacgtg	cactaaccgc	2640
gagccccgca	acgggggcct	gccctgcgtg	ggcgatgctg	ccgagtacca	ggactgcaac	2700
ccccaggctt	gcccagttcg	gggtgcttgg	tcctgctgga	cctcatggtc	tccatgctca	2760
gcttcctgtg	gtgggggtca	ctatcaacgc	acccgttcct	gcaccagccc	cgcaccctcc	2820
ccaggtgagg	acatctgtct	cgggctgcac	acggaggagg	cactatgtgc	cacacaggcc	2880
tgcccagaag	gctggtcgcc	ctgggtctgag	tggagtaagt	gcactgacga	cggagcccg	2940
agccgaagcc	ggcactgtga	ggagctcctc	ccaggggtcca	gcgcmgtgtg	tggaaacagc	3000
agccagagcc	gcccctgccc	ctacagcgag	attcscgtca	tcctgccagc	ctccagcatg	3060
gaggaggcca	ccgactgtgc	agggttcaat	ctcatccact	tggtggccac	gggcatctcc	3120
tgcttcttgg	gctctgggct	cctgacccta	gcagtgtacc	tgtcttgcca	gcactgccag	3180
cgtcagtcce	aggagtccac	actggtccat	cctgccaccc	ccaaccattt	gcactacaag	3240
ggcggaggca	ccccgaagaa	tgaaaagtac	acacccatgg	aattcaagac	cctgaacaag	3300
aataacttga	tccctgatga	cagagccaac	ttctacccat	tgcagcagac	caatgtgtac	3360
acgactactt	actaccaag	ccccctgaac	aaacacagct	tccggcccga	ggcctcacct	3420
ggacaacggt	gcttccccaa	cagctgatac	cgccgtcctg	gggacttggg	cttcttgcc	3480
tcataaggca	cagagcagat	ggagatggga	cagtggagcc	agtttggttt	tctccctctg	3540
cactaggcca	agaacttgct	gccttgccctg	tggggggtcc	catccggctt	cagagagctc	3600
tggctggcat	tgaccatggg	ggaaagggct	ggtttcaggc	tgacatatgg	ccgcagggtcc	3660
agttcagccc	aggtctmtca	tggttatctt	ccaacccact	gtcacgctga	cactatgctg	3720
ccatgcctgg	gctgtggacc	tactgggcat	ttgaggaayt	ggagaatgga	gatggcaaga	3780
gggcaggctt	ttaagtttgg	gttgagagaca	acttcctgtg	gccccacaa	gctgagctctg	3840
gccttctcca	gctggcccca	aaaaaggcct	ttgctacatc	ctgattatct	ctgaaagtaa	3900
tcaatcaagt	ggctccagta	gctctggatt	ttctgccagg	gctgggccat	tgtggtgctg	3960
ccccagtagt	acatgggacc	aaggccagcg	caggttatcc	acctctgcct	ggaagtctat	4020
actctaccca	gggcatccct	ctggtcagag	gcagtgaagta	ctgggaactg	gaggctgacc	4080
tgtgcttaga	agtcctttaa	tctgggctgg	tacaggcctc	agccttgccc	tcaatgcacg	4140
aaaggtggcc	caggagagag	gatcaatgcc	ataggaggca	gaagtctggc	ctctgtgcct	4200
ctatggagac	tatcttccag	ttgctgctca	acagagttgt	tggttgagac	ctgcttggga	4260
gtctctgctg	gcccttcatc	tgttcaggaa	cacacacaca	cacacactca	cacacgcaca	4320
cacaatcaca	atttgctaca	gcaacaaaaa	agacattggg	ctgtggcatt	attaattaaa	4380
gatgatatcc	agtcaaaaaa	aaact				4405

<210> 7

<211> 3938

<212> DNA

<213> Homo sapiens

<400> 7

gcggccgccc	cattcccaga	ccggccgcca	gcccattctg	ttagctccc	ccgctccg	60
ccgcccggga	gtcgggagcc	gcggggaacc	gggcacctgc	acccgcctct	gggagtgagt	120
ggttccagct	ggtgcctggc	ctgtgtctct	tggatgccct	gtggcttcag	tccgtctcct	180
gttgcacc	acctcgtccc	tgggcccgcct	gataccccag	cccaacagct	aagggttgga	240
tggacagtag	gggctggct	tctctcactg	gtcaggggtc	ttctcccctg	tctgcctccc	300
ggagctagga	ctgcagaggg	gcctatcatg	gtgcttgca	gccccctggc	tgtctcgctg	360
ttgctgcca	gcctcacact	gctggtgtcc	cacctctcca	gctcccagga	tgtctccagt	420
gagcccagca	gtgagcagca	gctgtgcgcc	cttagcaagc	accccaccgt	ggcctttgaa	480
gacctgcagc	cgtgggtctc	taacttcacc	taccctggag	cccgggattt	ctcccagctg	540
gctttggacc	cctccgggaa	ccagctcacc	gtgggagcca	ggaactacct	cttcagactc	600
agccttgcca	atgtctctct	tcttcaggcc	acagagtggg	cctccagtga	ggacacgcgc	660
cgctcctgcc	aaagcaaagg	gaagactgag	gaggagtgtc	agaactacgt	gcgagtcctg	720
atcgtcgccg	gccggaagg	gttcatgtgt	ggaaccaatg	ccttttcccc	catgtgcacc	780
agcagacagg	tggggaacct	cagccggact	actgagaaga	tcaatggtgt	ggcccgtgc	840
ccctatgacc	cacgccacaa	ctccacagct	gtcatctcct	cccaggggga	gctctatgca	900
gccacggtca	tcgacttctc	aggtcgggac	cctgccatct	accgcagcct	gggcagtggg	960
ccaccgcttc	gcactgcccc	atataactcc	aagtggctta	atgagccaaa	cttcgtggca	1020
gcctatgata	ttgggtgtgt	tgcatacttc	ttcctgcggg	agaacgcagt	ggagcacgac	1080
tgtggacgca	ccgtgtactc	tcgcgtggcc	cgcgtgtgca	agaatgacgt	ggggggccga	1140
ttcctgctgg	aggacacatg	gaccacattc	atgaaggccc	ggctcaactg	ctcccgcgcc	1200

ggcgaggtcc	ccttctacta	taacgagctg	cagagtgcct	tccacttgcc	agagcaggac	1260
ctcatctatg	gagttttcac	aaccaacgta	aacagcatcg	cggcttctgc	tgtctgcgcc	1320
ttcaacctca	gtgctatctc	ccaggctttc	aatggcccat	ttcgctacca	ggagaacccc	1380
agggtgcct	ggctcccat	agccaacccc	atccccaatt	tccagtgtgg	caccctgcct	1440
gagaccggtc	ccaacgagaa	cctgacggag	cgcagcctgc	aggacgcgca	gcgcctcttc	1500
ctgatgagcg	aggccgtgca	gccggtgaca	cccagagccct	gtgtcaccca	ggacagcgtg	1560
cgttctcac	acctcgtggt	ggacctggtg	caggctaaag	acacgctcta	ccatgtactc	1620
tacattggca	ccgagtcggg	caccatcctg	aaggcgtgtg	ccacggcgag	ccgcagcctc	1680
cacggctgct	acctggagga	gctgcacgtg	ctgccccccg	ggcgccgca	gcccctgcgc	1740
agcctgcgca	tcctgcacag	cgccccgcgc	ctcttcgtgg	ggctgagaga	cggcgtcctg	1800
cgggtccac	tggagaggtg	cgccgcctac	cgcagccagg	gggcatgcct	gggggccccg	1860
gacccgtact	gtggctggga	cggaagcag	caacgttgca	gcacactcga	ggacagctcc	1920
aacatgagcc	tctggaccca	gaacatcacc	gcctgtcctg	tgcggaatgt	gacacgggat	1980
gggggcttcg	gcccattggtc	accatggcaa	ccatgtgagc	acttggatgg	ggacaactca	2040
ggctcttgcc	tgtgtcgagc	tcgatcctgt	gattccccctc	gaccccgctg	tgggggcctt	2100
gactgcctgg	ggccagccat	ccacatcgcc	aactgtctca	ggaatggggc	gtggacccccg	2160
tgttcactga	gggcgtgtg	cagcacgtcc	tgtggcatcg	gcttcagggt	ccgccagcga	2220
agttgcagca	accctgtctc	ccgccacggg	ggccgcatct	gcgtgggcaa	gagccgggag	2280
gaacggttct	gtaatgagaa	cacgccttgc	ccggtgccca	tcttctgggc	ttcctggggc	2340
tcctggagca	agtgcagcag	caactgtgga	gggggcatgc	agtgcggcg	tcgggcctgc	2400
gagaacggca	actcctgcct	gggctgcggc	gtggagtcca	agacgtgcaa	ccccgagggc	2460
tgccccgaag	tgcggcgcaa	cacccccctg	acgccgtggc	tgcccgtgaa	cgtgacgcag	2520
ggcggggac	ggcaggagca	gcggttccgc	ttcacctgcc	gcgcgcccct	tgcagacccg	2580
cacggcctgc	agttcggcag	gagaaggacc	gagacgagga	cctgtcccgc	ggacggctcc	2640
ggctcctgcg	acacggagcg	cctggtggag	gtcctcctgc	gcagcgggag	cacctccccg	2700
cacacgttga	gcgggggctg	ggccgccttg	ggcccgtggt	cgtcctgctc	ccgggactgc	2760
gagctgggct	tcgcgctccg	caagagaacg	tgcactaacc	cggagccccg	caacgggggc	2820
ctgccctgcg	tgggcgatgc	tgccgagtac	caggactgca	acccccaggc	ttgccagtt	2880
cggggtgctt	ggtcctgctg	gacctcatgg	tctccatgct	cagcttcctg	tgggtgggggt	2940
cactatcaac	gcacccgttc	ctgcaccagc	cccgcaccct	ccccagggtga	ggacatctgt	3000
ctcgggctgc	acacggagga	ggcactatgt	gccacacagg	cctgcccaga	aggctggtcg	3060
ccctggtctg	agtggagtaa	gtgcactgac	gacggagccc	agagccgaag	ccggcactgt	3120
gaggagctcc	tcccagggtc	cagcgcmtgt	gctggaaaca	gcagccagag	ccgcccctgc	3180
ccctacagcg	agattcscgt	catcctgcca	gcctccagca	tggaggaggc	caccgactgt	3240
gcagggttca	atctcatcca	cttgggtggc	acgggcatct	cctgcttctt	gggctctggg	3300
ctcctgaccc	tagcagtgtg	cctgtcttgc	cagcactgcc	agcgtcagtc	ccaggagtcc	3360
acactggtcc	atcctgccac	ccccaacctc	ttgcactaca	agggcgagg	cacccccgaag	3420
aatgaaaagt	acacacccat	ggaattcaag	accctgaaca	agaataactt	gatccctgat	3480
gacagagcca	acttctaccc	attgcagcag	accaatgcca	gcgcagggtta	tccacctctg	3540
cctggaagtc	tatactctac	ccagggcatc	cctctggtca	gaggcagtga	gtactgggaa	3600
ctggaggctg	acctgtgctt	agaagtcctt	taatctgggc	tggtagaggc	ctcagccttg	3660
ccctcaatgc	acgaaagggtg	gcccaggaga	gaggatcaat	gccataggag	gcagaagtct	3720
ggcctctgtg	cctctatgga	gactatcttc	cagttgctgc	tcaacagagt	tgttggtctga	3780
gacctgcttg	ggagtctctg	ctggcccttc	atctgttcag	gaacacacac	acacacacac	3840
tcacacacgc	acacacaatc	acaatttgct	acagcaacaa	aaaagacatt	gggctgtggc	3900
attattaatt	aaagatgata	tccagtcaaa	aaaaaact			3938

<210> 8

<211> 1095

<212> PRT

<213> Homo sapiens

<400> 8

Met Val Leu Ala Gly Pro Leu Ala Val Ser Leu Leu Leu Pro Ser Leu
 1 5 10 15

Thr Leu Leu Val Ser His Leu Ser Ser Ser Gln Asp Val Ser Ser Glu
 20 25 30

Pro Ser Ser Glu Gln Gln Leu Cys Ala Leu Ser Lys His Pro Thr Val

35					40					45					
Ala	Phe	Glu	Asp	Leu	Gln	Pro	Trp	Val	Ser	Asn	Phe	Thr	Tyr	Pro	Gly
50					55					60					
Ala	Arg	Asp	Phe	Ser	Gln	Leu	Ala	Leu	Asp	Pro	Ser	Gly	Asn	Gln	Leu
65					70					75					80
Ile	Val	Gly	Ala	Arg	Asn	Tyr	Leu	Phe	Arg	Leu	Ser	Leu	Ala	Asn	Val
				85					90					95	
Ser	Leu	Leu	Gln	Ala	Thr	Glu	Trp	Ala	Ser	Ser	Glu	Asp	Thr	Arg	Arg
			100					105					110		
Ser	Cys	Gln	Ser	Lys	Gly	Lys	Thr	Glu	Glu	Glu	Cys	Gln	Asn	Tyr	Val
		115					120					125			
Arg	Val	Leu	Ile	Val	Ala	Gly	Arg	Lys	Val	Phe	Met	Cys	Gly	Thr	Asn
		130				135					140				
Ala	Phe	Ser	Pro	Met	Cys	Thr	Ser	Arg	Gln	Val	Gly	Asn	Leu	Ser	Arg
145					150					155					160
Thr	Thr	Glu	Lys	Ile	Asn	Gly	Val	Ala	Arg	Cys	Pro	Tyr	Asp	Pro	Arg
				165					170					175	
His	Asn	Ser	Thr	Ala	Val	Ile	Ser	Ser	Gln	Gly	Glu	Leu	Tyr	Ala	Ala
			180					185					190		
Thr	Val	Ile	Asp	Phe	Ser	Gly	Arg	Asp	Pro	Ala	Ile	Tyr	Arg	Ser	Leu
		195					200					205			
Gly	Ser	Gly	Pro	Pro	Leu	Arg	Thr	Ala	Gln	Tyr	Asn	Ser	Lys	Trp	Leu
		210				215					220				
Asn	Glu	Pro	Asn	Phe	Val	Ala	Ala	Tyr	Asp	Ile	Gly	Leu	Phe	Ala	Tyr
225					230					235					240
Phe	Phe	Leu	Arg	Glu	Asn	Ala	Val	Glu	His	Asp	Cys	Gly	Arg	Thr	Val
				245					250					255	
Tyr	Ser	Arg	Val	Ala	Arg	Val	Cys	Lys	Asn	Asp	Val	Gly	Gly	Arg	Phe
			260					265					270		
Leu	Leu	Glu	Asp	Thr	Trp	Thr	Thr	Phe	Met	Lys	Ala	Arg	Leu	Asn	Cys
		275					280					285			
Ser	Arg	Pro	Gly	Glu	Val	Pro	Phe	Tyr	Tyr	Asn	Glu	Leu	Gln	Ser	Ala
		290				295					300				
Phe	His	Leu	Pro	Glu	Gln	Asp	Leu	Ile	Tyr	Gly	Val	Phe	Thr	Thr	Asn
305					310					315					320
Val	Asn	Ser	Ile	Ala	Ala	Ser	Ala	Val	Cys	Ala	Phe	Asn	Leu	Ser	Ala
				325					330				335		
Ile	Ser	Gln	Ala	Phe	Asn	Gly	Pro	Phe	Arg	Tyr	Gln	Glu	Asn	Pro	Arg
			340					345					350		
Ala	Ala	Trp	Leu	Pro	Ile	Ala	Asn	Pro	Ile	Pro	Asn	Phe	Gln	Cys	Gly
		355					360					365			

Thr Leu Pro Glu Thr Gly Pro Asn Glu Asn Leu Thr Glu Arg Ser Leu
 370 375 380
 Gln Asp Ala Gln Arg Leu Phe Leu Met Ser Glu Ala Val Gln Pro Val
 385 390 395 400
 Thr Pro Glu Pro Cys Val Thr Gln Asp Ser Val Arg Phe Ser His Leu
 405 410 415
 Val Val Asp Leu Val Gln Ala Lys Asp Thr Leu Tyr His Val Leu Tyr
 420 425 430
 Ile Gly Thr Glu Ser Gly Thr Ile Leu Lys Ala Leu Ser Thr Ala Ser
 435 440 445
 Arg Ser Leu His Gly Cys Tyr Leu Glu Glu Leu His Val Leu Pro Pro
 450 455 460
 Gly Arg Arg Glu Pro Leu Arg Ser Leu Arg Ile Leu His Ser Ala Arg
 465 470 475 480
 Ala Leu Phe Val Gly Leu Arg Asp Gly Val Leu Arg Val Pro Leu Glu
 485 490 495
 Arg Cys Ala Ala Tyr Arg Ser Gln Gly Ala Cys Leu Gly Ala Arg Asp
 500 505 510
 Pro Tyr Cys Gly Trp Asp Gly Lys Gln Gln Arg Cys Ser Thr Leu Glu
 515 520 525
 Asp Ser Ser Asn Met Ser Leu Trp Thr Gln Asn Ile Thr Ala Cys Pro
 530 535 540
 Val Arg Asn Val Thr Arg Asp Gly Gly Phe Gly Pro Trp Ser Pro Trp
 545 550 555 560
 Gln Pro Cys Glu His Leu Asp Gly Asp Asn Ser Gly Ser Cys Leu Cys
 565 570 575
 Arg Ala Arg Ser Cys Asp Ser Pro Arg Pro Arg Cys Gly Gly Leu Asp
 580 585 590
 Cys Leu Gly Pro Ala Ile His Ile Ala Asn Cys Ser Arg Asn Gly Gly
 595 600 605
 Arg Gly Pro Arg Gly Ala Ser Trp Ala Ala Val Gln Ala Arg Pro Val
 610 615 620
 Ala Ser Gly Phe Gln Val Arg Gln Arg Ser Cys Ser Asn Pro Ala Pro
 625 630 635 640
 Arg His Gly Gly Arg Ile Cys Val Gly Lys Ser Arg Glu Glu Arg Phe
 645 650 655
 Cys Asn Glu Asn Thr Pro Cys Pro Val Pro Ile Phe Trp Ala Ser Trp
 660 665 670
 Gly Ser Trp Ser Lys Cys Ser Ser Asn Cys Gly Gly Gly Met Gln Ser
 675 680 685

Arg Arg Arg Ala Cys Glu Asn Gly Asn Ser Cys Leu Gly Cys Gly Val
 690 695 700
 Glu Phe Lys Thr Cys Asn Pro Glu Gly Cys Pro Glu Val Arg Arg Asn
 705 710 715 720
 Thr Pro Trp Thr Pro Trp Leu Pro Val Asn Val Thr Gln Gly Gly Ala
 725 730 735
 Arg Gln Glu Gln Arg Phe Arg Phe Thr Cys Arg Ala Pro Leu Ala Asp
 740 745 750
 Pro His Gly Leu Gln Phe Gly Arg Arg Arg Thr Glu Thr Arg Thr Cys
 755 760 765
 Pro Ala Asp Gly Ser Gly Ser Cys Asp Thr Asp Ala Leu Val Glu Val
 770 775 780
 Leu Leu Arg Ser Gly Ser Thr Ser Pro His Thr Val Ser Gly Gly Trp
 785 790 795 800
 Ala Ala Trp Gly Pro Trp Ser Ser Cys Ser Arg Asp Cys Glu Leu Gly
 805 810 815
 Phe Arg Val Arg Lys Arg Thr Cys Thr Asn Pro Glu Pro Arg Asn Gly
 820 825 830
 Gly Leu Pro Cys Val Gly Asp Ala Ala Glu Tyr Gln Asp Cys Asn Pro
 835 840 845
 Gln Ala Cys Pro Val Arg Gly Ala Trp Ser Cys Trp Thr Ser Trp Ser
 850 855 860
 Pro Cys Ser Ala Ser Cys Gly Gly Gly His Tyr Gln Arg Thr Arg Ser
 865 870 875 880
 Cys Thr Ser Pro Ala Pro Ser Pro Gly Glu Asp Ile Cys Leu Gly Leu
 885 890 895
 His Thr Glu Glu Ala Leu Cys Ala Thr Gln Ala Cys Pro Glu Gly Trp
 900 905 910
 Ser Pro Trp Ser Glu Trp Ser Lys Cys Thr Asp Asp Gly Ala Gln Ser
 915 920 925
 Arg Ser Arg His Cys Glu Glu Leu Leu Pro Gly Ser Ser Ala Cys Ala
 930 935 940
 Gly Asn Ser Ser Gln Ser Arg Pro Cys Pro Tyr Ser Glu Ile Arg Val
 945 950 955 960
 Ile Leu Pro Ala Ser Ser Met Glu Glu Ala Thr Asp Cys Ala Gly Phe
 965 970 975
 Asn Leu Ile His Leu Val Ala Thr Gly Ile Ser Cys Phe Leu Gly Ser
 980 985 990
 Gly Leu Leu Thr Leu Ala Val Tyr Leu Ser Cys Gln His Cys Gln Arg
 995 1000 1005
 Gln Ser Gln Glu Ser Thr Leu Val His Pro Ala Thr Pro Asn His

1010	1015	1020
Leu His Tyr Lys Gly Gly Gly Thr Pro Lys Asn Glu Lys Tyr Thr 1025 1030 1035		
Pro Met Glu Phe Lys Thr Leu Asn Lys Asn Asn Leu Ile Pro Asp 1040 1045 1050		
Asp Arg Ala Asn Phe Tyr Pro Leu Gln Gln Thr Asn Val Tyr Thr 1055 1060 1065		
Thr Thr Tyr Tyr Pro Ser Pro Leu Asn Lys His Ser Phe Arg Pro 1070 1075 1080		
Glu Ala Ser Pro Gly Gln Arg Cys Phe Pro Asn Ser 1085 1090 1095		
<210> 9		
<211> 1248		
<212> PRT		
<213> Homo sapiens		
<400> 9		
Arg Pro Pro His Ser Gln Thr Gly Arg Gln Pro Ile Trp Leu Ala Pro 1 5 10 15		
Ala Ala Pro Arg Arg Pro Gly Val Gly Ser Arg Gly Glu Pro Gly Thr 20 25 30		
Cys Thr Arg Leu Trp Glu Pro Ala Trp Val Arg Val Ala Leu Gly Pro 35 40 45		
Ala Arg Ala Val Val Gly Ala Ser Gly Leu Gln Arg Arg Trp Gly Pro 50 55 60		
Gly Thr Gln Ala Trp Arg Arg Arg Arg Thr Ser Glu Ala Glu Gly Arg 65 70 75 80		
Arg Asp Arg Val Ser Gly Ser Ser Trp Cys Leu Ala Cys Val Ser Trp 85 90 95		
Met Pro Cys Gly Phe Ser Pro Ser Pro Val Ala His His Leu Val Pro 100 105 110		
Gly Pro Pro Asp Thr Pro Ala Gln Gln Leu Arg Cys Gly Trp Thr Val 115 120 125		
Gly Gly Trp Leu Leu Ser Leu Val Arg Gly Leu Leu Pro Cys Leu Pro 130 135 140		
Pro Gly Ala Arg Thr Ala Glu Gly Pro Ile Met Val Leu Ala Gly Pro 145 150 155 160		
Leu Ala Val Ser Leu Leu Leu Pro Ser Leu Thr Leu Leu Val Ser His 165 170 175		
Leu Ser Ser Ser Gln Asp Val Ser Ser Glu Pro Ser Ser Glu Gln Gln 180 185 190		
Leu Cys Ala Leu Ser Lys His Pro Thr Val Ala Phe Glu Asp Leu Gln		

195					200					205					
Pro	Trp	Val	Ser	Asn	Phe	Thr	Tyr	Pro	Gly	Ala	Arg	Asp	Phe	Ser	Gln
210						215					220				
Leu	Ala	Leu	Asp	Pro	Ser	Gly	Asn	Gln	Leu	Ile	Val	Gly	Ala	Arg	Asn
225					230					235					240
Tyr	Leu	Phe	Arg	Leu	Ser	Leu	Ala	Asn	Val	Ser	Leu	Leu	Gln	Ala	Thr
				245					250					255	
Glu	Trp	Ala	Ser	Ser	Glu	Asp	Thr	Arg	Arg	Ser	Cys	Gln	Ser	Lys	Gly
			260					265						270	
Lys	Thr	Glu	Glu	Glu	Cys	Gln	Asn	Tyr	Val	Arg	Val	Leu	Ile	Val	Ala
		275					280					285			
Gly	Arg	Lys	Val	Phe	Met	Cys	Gly	Thr	Asn	Ala	Phe	Ser	Pro	Met	Cys
	290					295					300				
Thr	Ser	Arg	Gln	Val	Gly	Asn	Leu	Ser	Arg	Thr	Thr	Glu	Lys	Ile	Asn
305					310					315					320
Gly	Val	Ala	Arg	Cys	Pro	Tyr	Asp	Pro	Arg	His	Asn	Ser	Thr	Ala	Val
				325					330					335	
Ile	Ser	Ser	Gln	Gly	Glu	Leu	Tyr	Ala	Ala	Thr	Val	Ile	Asp	Phe	Ser
			340					345					350		
Gly	Arg	Asp	Pro	Ala	Ile	Tyr	Arg	Ser	Leu	Gly	Ser	Gly	Pro	Pro	Leu
		355					360					365			
Arg	Thr	Ala	Gln	Tyr	Asn	Ser	Lys	Trp	Leu	Asn	Glu	Pro	Asn	Phe	Val
	370					375					380				
Ala	Ala	Tyr	Asp	Ile	Gly	Leu	Phe	Ala	Tyr	Phe	Phe	Leu	Arg	Glu	Asn
385					390					395					400
Ala	Val	Glu	His	Asp	Cys	Gly	Arg	Thr	Val	Tyr	Ser	Arg	Val	Ala	Arg
				405					410					415	
Val	Cys	Lys	Asn	Asp	Val	Gly	Gly	Arg	Phe	Leu	Leu	Glu	Asp	Thr	Trp
			420					425					430		
Thr	Thr	Phe	Met	Lys	Ala	Arg	Leu	Asn	Cys	Ser	Arg	Pro	Gly	Glu	Val
		435					440					445			
Pro	Phe	Tyr	Tyr	Asn	Glu	Leu	Gln	Ser	Ala	Phe	His	Leu	Pro	Glu	Gln
	450					455					460				
Asp	Leu	Ile	Tyr	Gly	Val	Phe	Thr	Thr	Asn	Val	Asn	Ser	Ile	Ala	Ala
465					470					475					480
Ser	Ala	Val	Cys	Ala	Phe	Asn	Leu	Ser	Ala	Ile	Ser	Gln	Ala	Phe	Asn
				485					490					495	
Gly	Pro	Phe	Arg	Tyr	Gln	Glu	Asn	Pro	Arg	Ala	Ala	Trp	Leu	Pro	Ile
			500					505					510		
Ala	Asn	Pro	Ile	Pro	Asn	Phe	Gln	Cys	Gly	Thr	Leu	Pro	Glu	Thr	Gly
		515					520					525			

Pro Asn Glu Asn Leu Thr Glu Arg Ser Leu Gln Asp Ala Gln Arg Leu
 530 535 540
 Phe Leu Met Ser Glu Ala Val Gln Pro Val Thr Pro Glu Pro Cys Val
 545 550 555 560
 Thr Gln Asp Ser Val Arg Phe Ser His Leu Val Val Asp Leu Val Gln
 565 570 575
 Ala Lys Asp Thr Leu Tyr His Val Leu Tyr Ile Gly Thr Glu Ser Gly
 580 585 590
 Thr Ile Leu Lys Ala Leu Ser Thr Ala Ser Arg Ser Leu His Gly Cys
 595 600 605
 Tyr Leu Glu Glu Leu His Val Leu Pro Pro Gly Arg Arg Glu Pro Leu
 610 615 620
 Arg Ser Leu Arg Ile Leu His Ser Ala Arg Ala Leu Phe Val Gly Leu
 625 630 635 640
 Arg Asp Gly Val Leu Arg Val Pro Leu Glu Arg Cys Ala Ala Tyr Arg
 645 650 655
 Ser Gln Gly Ala Cys Leu Gly Ala Arg Asp Pro Tyr Cys Gly Trp Asp
 660 665 670
 Gly Lys Gln Gln Arg Cys Ser Thr Leu Glu Asp Ser Ser Asn Met Ser
 675 680 685
 Leu Trp Thr Gln Asn Ile Thr Ala Cys Pro Val Arg Asn Val Thr Arg
 690 695 700
 Asp Gly Gly Phe Gly Pro Trp Ser Pro Trp Gln Pro Cys Glu His Leu
 705 710 715 720
 Asp Gly Asp Asn Ser Gly Ser Cys Leu Cys Arg Ala Arg Ser Cys Asp
 725 730 735
 Ser Pro Arg Pro Arg Cys Gly Gly Leu Asp Cys Leu Gly Pro Ala Ile
 740 745 750
 His Ile Ala Asn Cys Ser Arg Asn Gly Ala Val Asp Pro Val Val Ile
 755 760 765
 Val Gly Arg Cys Ala Ala Thr Ser Cys Gly Ile Gly Phe Gln Val Arg
 770 775 780
 Gln Arg Ser Cys Ser Asn Pro Ala Pro Arg His Gly Gly Arg Ile Cys
 785 790 795 800
 Val Gly Lys Ser Arg Glu Glu Arg Phe Cys Asn Glu Asn Thr Pro Cys
 805 810 815
 Pro Val Pro Ile Phe Trp Ala Ser Trp Gly Ser Trp Ser Lys Cys Ser
 820 825 830
 Ser Asn Cys Gly Gly Gly Met Gln Ser Arg Arg Arg Ala Cys Glu Asn
 835 840 845

Gly Asn Ser Cys Leu Gly Cys Gly Val Glu Phe Lys Thr Cys Asn Pro
 850 855 860
 Glu Gly Cys Pro Glu Val Arg Arg Asn Thr Pro Trp Thr Pro Trp Leu
 865 870 875 880
 Pro Val Asn Val Thr Gln Gly Gly Ala Arg Gln Glu Gln Arg Phe Arg
 885 890 895
 Phe Thr Cys Arg Ala Pro Leu Ala Asp Pro His Gly Leu Gln Phe Gly
 900 905 910
 Arg Arg Arg Thr Glu Thr Arg Thr Cys Pro Ala Asp Gly Ser Gly Ser
 915 920 925
 Cys Asp Thr Asp Ala Leu Val Glu Val Leu Leu Arg Ser Gly Ser Thr
 930 935 940
 Ser Pro His Thr Val Ser Gly Gly Trp Ala Ala Trp Gly Pro Trp Ser
 945 950 955 960
 Ser Cys Ser Arg Asp Cys Glu Leu Gly Phe Arg Val Arg Lys Arg Thr
 965 970 975
 Cys Thr Asn Pro Glu Pro Arg Asn Gly Gly Leu Pro Cys Val Gly Asp
 980 985 990
 Ala Ala Glu Tyr Gln Asp Cys Asn Pro Gln Ala Cys Pro Val Arg Gly
 995 1000 1005
 Ala Trp Ser Cys Trp Thr Ser Trp Ser Pro Cys Ser Ala Ser Cys
 1010 1015 1020
 Gly Gly Gly His Tyr Gln Arg Thr Arg Ser Cys Thr Ser Pro Ala
 1025 1030 1035
 Pro Ser Pro Gly Glu Asp Ile Cys Leu Gly Leu His Thr Glu Glu
 1040 1045 1050
 Ala Leu Cys Ala Thr Gln Ala Cys Pro Glu Gly Trp Ser Pro Trp
 1055 1060 1065
 Ser Glu Trp Ser Lys Cys Thr Asp Asp Gly Ala Gln Ser Arg Ser
 1070 1075 1080
 Arg His Cys Glu Glu Leu Leu Pro Gly Ser Ser Ala Cys Ala Gly
 1085 1090 1095
 Asn Ser Ser Gln Ser Arg Pro Cys Pro Tyr Ser Glu Ile Arg Val
 1100 1105 1110
 Ile Leu Pro Ala Ser Ser Met Glu Glu Ala Thr Asp Cys Ala Gly
 1115 1120 1125
 Phe Asn Leu Ile His Leu Val Ala Thr Gly Ile Ser Cys Phe Leu
 1130 1135 1140
 Gly Ser Gly Leu Leu Thr Leu Ala Val Tyr Leu Ser Cys Gln His
 1145 1150 1155
 Cys Gln Arg Gln Ser Gln Glu Ser Thr Leu Val His Pro Ala Thr

1160 1165 1170
 Pro Asn His Leu His Tyr Lys Gly Gly Gly Thr Pro Lys Asn Glu
 1175 1180 1185
 Lys Tyr Thr Pro Met Glu Phe Lys Thr Leu Asn Lys Asn Asn Leu
 1190 1195 1200
 Ile Pro Asp Asp Arg Ala Asn Phe Tyr Pro Leu Gln Gln Thr Asn
 1205 1210 1215
 Val Tyr Thr Thr Thr Tyr Tyr Pro Ser Pro Leu Asn Lys His Ser
 1220 1225 1230
 Phe Arg Pro Glu Ala Ser Pro Gly Gln Arg Cys Phe Pro Asn Ser
 1235 1240 1245

 <210> 10
 <211> 1150
 <212> PRT
 <213> Homo sapiens

 <400> 10
 Ala Ala Ala Pro Phe Pro Asp Arg Pro Pro Ala His Leu Val Ser Ser
 1 5 10 15
 Arg Arg Ser Ala Pro Pro Gly Ser Arg Glu Pro Arg Gly Thr Gly His
 20 25 30
 Leu His Pro Pro Leu Gly Gly Leu Leu Pro Cys Leu Pro Pro Gly Ala
 35 40 45
 Arg Thr Ala Glu Gly Pro Ile Met Val Leu Ala Gly Pro Leu Ala Val
 50 55 60
 Ser Leu Leu Leu Pro Ser Leu Thr Leu Leu Val Ser His Leu Ser Ser
 65 70 75 80
 Ser Gln Asp Val Ser Ser Glu Pro Ser Ser Glu Gln Gln Leu Cys Ala
 85 90 95
 Leu Ser Lys His Pro Thr Val Ala Phe Glu Asp Leu Gln Pro Trp Val
 100 105 110
 Ser Asn Phe Thr Tyr Pro Gly Ala Arg Asp Phe Ser Gln Leu Ala Leu
 115 120 125
 Asp Pro Ser Gly Asn Gln Leu Ile Val Gly Ala Arg Asn Tyr Leu Phe
 130 135 140
 Arg Leu Ser Leu Ala Asn Val Ser Leu Leu Gln Ala Thr Glu Trp Ala
 145 150 155 160
 Ser Ser Glu Asp Thr Arg Arg Ser Cys Gln Ser Lys Gly Lys Thr Glu
 165 170 175
 Glu Glu Cys Gln Asn Tyr Val Arg Val Leu Ile Val Ala Gly Arg Lys
 180 185 190
 Val Phe Met Cys Gly Thr Asn Ala Phe Ser Pro Met Cys Thr Ser Arg

195					200					205					
Gln	Val	Gly	Asn	Leu	Ser	Arg	Thr	Thr	Glu	Lys	Ile	Asn	Gly	Val	Ala
210						215					220				
Arg	Cys	Pro	Tyr	Asp	Pro	Arg	His	Asn	Ser	Thr	Ala	Val	Ile	Ser	Ser
225					230					235					240
Gln	Gly	Glu	Leu	Tyr	Ala	Ala	Thr	Val	Ile	Asp	Phe	Ser	Gly	Arg	Asp
				245					250					255	
Pro	Ala	Ile	Tyr	Arg	Ser	Leu	Gly	Ser	Gly	Pro	Pro	Leu	Arg	Thr	Ala
			260					265					270		
Gln	Tyr	Asn	Ser	Lys	Trp	Leu	Asn	Glu	Pro	Asn	Phe	Val	Ala	Ala	Tyr
		275					280					285			
Asp	Ile	Gly	Leu	Phe	Ala	Tyr	Phe	Phe	Leu	Arg	Glu	Asn	Ala	Val	Glu
	290					295					300				
His	Asp	Cys	Gly	Arg	Thr	Val	Tyr	Ser	Arg	Val	Ala	Arg	Val	Cys	Lys
305						310					315				320
Asn	Asp	Val	Gly	Gly	Arg	Phe	Leu	Leu	Glu	Asp	Thr	Trp	Thr	Thr	Phe
			325						330					335	
Met	Lys	Ala	Arg	Leu	Asn	Cys	Ser	Arg	Pro	Gly	Glu	Val	Pro	Phe	Tyr
			340					345					350		
Tyr	Asn	Glu	Leu	Gln	Ser	Ala	Phe	His	Leu	Pro	Glu	Gln	Asp	Leu	Ile
		355					360					365			
Tyr	Gly	Val	Phe	Thr	Thr	Asn	Val	Asn	Ser	Ile	Ala	Ala	Ser	Ala	Val
	370					375					380				
Cys	Ala	Phe	Asn	Leu	Ser	Ala	Ile	Ser	Gln	Ala	Phe	Asn	Gly	Pro	Phe
385					390					395					400
Arg	Tyr	Gln	Glu	Asn	Pro	Arg	Ala	Ala	Trp	Leu	Pro	Ile	Ala	Asn	Pro
				405					410					415	
Ile	Pro	Asn	Phe	Gln	Cys	Gly	Thr	Leu	Pro	Glu	Thr	Gly	Pro	Asn	Glu
			420					425					430		
Asn	Leu	Thr	Glu	Arg	Ser	Leu	Gln	Asp	Ala	Gln	Arg	Leu	Phe	Leu	Met
		435					440					445			
Ser	Glu	Ala	Val	Gln	Pro	Val	Thr	Pro	Glu	Pro	Cys	Val	Thr	Gln	Asp
	450					455					460				
Ser	Val	Arg	Phe	Ser	His	Leu	Val	Val	Asp	Leu	Val	Gln	Ala	Lys	Asp
465					470					475					480
Thr	Leu	Tyr	His	Val	Leu	Tyr	Ile	Gly	Thr	Glu	Ser	Gly	Thr	Ile	Leu
			485					490						495	
Lys	Ala	Leu	Ser	Thr	Ala	Ser	Arg	Ser	Leu	His	Gly	Cys	Tyr	Leu	Glu
			500					505					510		
Glu	Leu	His	Val	Leu	Pro	Pro	Gly	Arg	Arg	Glu	Pro	Leu	Arg	Ser	Leu
		515					520					525			

Arg Ile Leu His Ser Ala Arg Ala Leu Phe Val Gly Leu Arg Asp Gly
 530 535 540
 Val Leu Arg Val Pro Leu Glu Arg Cys Ala Ala Tyr Arg Ser Gln Gly
 545 550 555 560
 Ala Cys Leu Gly Ala Arg Asp Pro Tyr Cys Gly Trp Asp Gly Lys Gln
 565 570 575
 Gln Arg Cys Ser Thr Leu Glu Asp Ser Ser Asn Met Ser Leu Trp Thr
 580 585 590
 Gln Asn Ile Thr Ala Cys Pro Val Arg Asn Val Thr Arg Asp Gly Gly
 595 600 605
 Phe Gly Pro Trp Ser Pro Trp Gln Pro Cys Glu His Leu Asp Gly Asp
 610 615 620
 Asn Ser Gly Ser Cys Leu Cys Arg Ala Arg Ser Cys Asp Ser Pro Arg
 625 630 635 640
 Pro Arg Cys Gly Gly Leu Asp Cys Leu Gly Pro Ala Ile His Ile Ala
 645 650 655
 Asn Cys Ser Arg Asn Gly Ala Val Asp Pro Val Val His Arg Gly Pro
 660 665 670
 Leu Cys Ser His Val Leu Trp His Ala Ala Ser Arg Ser Ala Ser Glu
 675 680 685
 Val Ala Ala Thr Leu Leu Pro Ala Thr Gly Ala Ala Ser Ala Trp Ala
 690 695 700
 Arg Ala Trp Glu Glu Arg Phe Cys Asn Glu Asn Thr Pro Cys Pro Val
 705 710 715 720
 Pro Ile Phe Trp Ala Ser Trp Gly Ser Trp Ser Lys Cys Ser Ser Asn
 725 730 735
 Cys Gly Gly Gly Met Gln Ser Arg Arg Arg Ala Cys Glu Asn Gly Asn
 740 745 750
 Ser Cys Leu Gly Cys Gly Val Glu Phe Lys Thr Cys Asn Pro Glu Gly
 755 760 765
 Cys Pro Glu Val Arg Arg Asn Thr Pro Trp Thr Pro Trp Leu Pro Val
 770 775 780
 Asn Val Thr Gln Gly Gly Ala Arg Gln Glu Gln Arg Phe Arg Phe Thr
 785 790 795 800
 Cys Arg Ala Pro Leu Ala Asp Pro His Gly Leu Gln Phe Gly Arg Arg
 805 810 815
 Arg Thr Glu Thr Arg Thr Cys Pro Ala Asp Gly Ser Gly Ser Cys Asp
 820 825 830
 Thr Asp Ala Leu Val Glu Val Leu Leu Arg Ser Gly Ser Thr Ser Pro
 835 840 845

His Thr Val Ser Gly Gly Trp Ala Ala Trp Gly Pro Trp Ser Ser Cys
 850 855 860
 Ser Arg Asp Cys Glu Leu Gly Phe Arg Val Arg Lys Arg Thr Cys Thr
 865 870 875 880
 Asn Pro Glu Pro Arg Asn Gly Gly Leu Pro Cys Val Gly Asp Ala Ala
 885 890 895
 Glu Tyr Gln Asp Cys Asn Pro Gln Ala Cys Pro Val Arg Gly Ala Trp
 900 905 910
 Ser Cys Trp Thr Ser Trp Ser Pro Cys Ser Ala Ser Cys Gly Gly Gly
 915 920 925
 His Tyr Gln Arg Thr Arg Ser Cys Thr Ser Pro Ala Pro Ser Pro Gly
 930 935 940
 Glu Asp Ile Cys Leu Gly Leu His Thr Glu Glu Ala Leu Cys Ala Thr
 945 950 955 960
 Gln Ala Cys Pro Glu Gly Trp Ser Pro Trp Ser Glu Trp Ser Lys Cys
 965 970 975
 Thr Asp Asp Gly Ala Gln Ser Arg Ser Arg His Cys Glu Glu Leu Leu
 980 985 990
 Pro Gly Ser Ser Ala Cys Ala Gly Asn Ser Ser Gln Ser Arg Pro Cys
 995 1000 1005
 Pro Tyr Ser Glu Ile Arg Val Ile Leu Pro Ala Ser Ser Met Glu
 1010 1015 1020
 Glu Ala Thr Asp Cys Ala Gly Phe Asn Leu Ile His Leu Val Ala
 1025 1030 1035
 Thr Gly Ile Ser Cys Phe Leu Gly Ser Gly Leu Leu Thr Leu Ala
 1040 1045 1050
 Val Tyr Leu Ser Cys Gln His Cys Gln Arg Gln Ser Gln Glu Ser
 1055 1060 1065
 Thr Leu Val His Pro Ala Thr Pro Asn His Leu His Tyr Lys Gly
 1070 1075 1080
 Gly Gly Thr Pro Lys Asn Glu Lys Tyr Thr Pro Met Glu Phe Lys
 1085 1090 1095
 Thr Leu Asn Lys Asn Asn Leu Ile Pro Asp Asp Arg Ala Asn Phe
 1100 1105 1110
 Tyr Pro Leu Gln Gln Thr Asn Val Tyr Thr Thr Thr Tyr Tyr Pro
 1115 1120 1125
 Ser Pro Leu Asn Lys His Ser Phe Arg Pro Glu Ala Ser Pro Gly
 1130 1135 1140
 Gln Arg Cys Phe Pro Asn Ser
 1145 1150

<210> 11
 <211> 1211
 <212> PRT
 <213> Homo sapiens

<400> 11

Ala	Ala	Ala	Pro	Phe	Pro	Asp	Arg	Pro	Pro	Ala	His	Leu	Val	Ser	Ser
1				5					10					15	
Arg	Arg	Ser	Ala	Pro	Pro	Gly	Ser	Arg	Glu	Pro	Arg	Gly	Thr	Gly	His
			20					25					30		
Leu	His	Pro	Pro	Leu	Gly	Val	Ser	Gly	Ser	Ser	Trp	Cys	Leu	Ala	Cys
		35					40					45			
Val	Ser	Trp	Met	Pro	Cys	Gly	Phe	Ser	Pro	Ser	Pro	Val	Ala	His	His
	50					55					60				
Leu	Val	Pro	Gly	Pro	Pro	Asp	Thr	Pro	Ala	Gln	Gln	Leu	Arg	Cys	Gly
65					70					75					80
Trp	Thr	Val	Gly	Gly	Trp	Leu	Leu	Ser	Leu	Val	Arg	Gly	Leu	Leu	Pro
			85						90					95	
Cys	Leu	Pro	Pro	Gly	Ala	Arg	Thr	Ala	Glu	Gly	Pro	Ile	Met	Val	Leu
			100					105					110		
Ala	Gly	Pro	Leu	Ala	Val	Ser	Leu	Leu	Leu	Pro	Ser	Leu	Thr	Leu	Leu
		115					120					125			
Val	Ser	His	Leu	Ser	Ser	Ser	Gln	Asp	Val	Ser	Ser	Glu	Pro	Ser	Ser
	130					135					140				
Glu	Gln	Gln	Leu	Cys	Ala	Leu	Ser	Lys	His	Pro	Thr	Val	Ala	Phe	Glu
145					150					155					160
Asp	Leu	Gln	Pro	Trp	Val	Ser	Asn	Phe	Thr	Tyr	Pro	Gly	Ala	Arg	Asp
				165					170					175	
Phe	Ser	Gln	Leu	Ala	Leu	Asp	Pro	Ser	Gly	Asn	Gln	Leu	Ile	Val	Gly
			180					185					190		
Ala	Arg	Asn	Tyr	Leu	Phe	Arg	Leu	Ser	Leu	Ala	Asn	Val	Ser	Leu	Leu
		195					200					205			
Gln	Ala	Thr	Glu	Trp	Ala	Ser	Ser	Glu	Asp	Thr	Arg	Arg	Ser	Cys	Gln
	210					215					220				
Ser	Lys	Gly	Lys	Thr	Glu	Glu	Glu	Cys	Gln	Asn	Tyr	Val	Arg	Val	Leu
225					230					235					240
Ile	Val	Ala	Gly	Arg	Lys	Val	Phe	Met	Cys	Gly	Thr	Asn	Ala	Phe	Ser
				245					250					255	
Pro	Met	Cys	Thr	Ser	Arg	Gln	Val	Gly	Asn	Leu	Ser	Arg	Thr	Thr	Glu
			260					265					270		
Lys	Ile	Asn	Gly	Val	Ala	Arg	Cys	Pro	Tyr	Asp	Pro	Arg	His	Asn	Ser
		275					280					285			
Thr	Ala	Val	Ile	Ser	Ser	Gln	Gly	Glu	Leu	Tyr	Ala	Ala	Thr	Val	Ile

290					295					300					
Asp 305	Phe	Ser	Gly	Arg	Asp 310	Pro	Ala	Ile	Tyr	Arg 315	Ser	Leu	Gly	Ser	Gly 320
Pro	Pro	Leu	Arg	Thr 325	Ala	Gln	Tyr	Asn	Ser 330	Lys	Trp	Leu	Asn	Glu	Pro 335
Asn	Phe	Val	Ala	Ala 340	Tyr	Asp	Ile	Gly 345	Leu	Phe	Ala	Tyr	Phe	Phe	Leu 350
Arg	Glu	Asn	Ala	Val 355	Glu	His	Asp 360	Cys	Gly	Arg	Thr	Val	Tyr	Ser	Arg 365
Val	Ala 370	Arg	Val	Cys	Lys	Asn 375	Asp	Val	Gly	Gly	Arg 380	Phe	Leu	Leu	Glu
Asp 385	Thr	Trp	Thr	Thr	Phe 390	Met	Lys	Ala	Arg	Leu 395	Asn	Cys	Ser	Arg	Pro 400
Gly	Glu	Val	Pro	Phe 405	Tyr	Tyr	Asn	Glu	Leu 410	Gln	Ser	Ala	Phe	His	Leu 415
Pro	Glu	Gln	Asp 420	Leu	Ile	Tyr	Gly	Val 425	Phe	Thr	Thr	Asn	Val	Asn	Ser 430
Ile	Ala	Ala	Ser	Ala 435	Val	Cys	Ala 440	Phe	Asn	Leu	Ser	Ala 445	Ile	Ser	Gln
Ala	Phe	Asn	Gly	Pro	Phe	Arg 455	Tyr	Gln	Glu	Asn	Pro 460	Arg	Ala	Ala	Trp
Leu 465	Pro	Ile	Ala	Asn 470	Pro	Ile	Pro	Asn	Phe	Gln 475	Cys	Gly	Thr	Leu	Pro 480
Glu	Thr	Gly	Pro	Asn 485	Glu	Asn	Leu	Thr	Glu 490	Arg	Ser	Leu	Gln	Asp	Ala 495
Gln	Arg	Leu	Phe	Leu 500	Met	Ser	Glu	Ala 505	Val	Gln	Pro	Val	Thr	Pro	Glu 510
Pro	Cys	Val 515	Thr	Gln	Asp	Ser	Val 520	Arg	Phe	Ser	His	Leu 525	Val	Val	Asp
Leu 530	Val	Gln	Ala	Lys	Asp	Thr 535	Leu	Tyr	His	Val	Leu 540	Tyr	Ile	Gly	Thr
Glu 545	Ser	Gly	Thr	Ile	Leu 550	Lys	Ala	Leu	Ser	Thr 555	Ala	Ser	Arg	Ser	Leu 560
His	Gly	Cys	Tyr	Leu 565	Glu	Glu	Leu	His	Val 570	Leu	Pro	Pro	Gly	Arg	Arg 575
Glu	Pro	Leu	Arg 580	Ser	Leu	Arg	Ile	Leu 585	His	Ser	Ala	Arg	Ala	Leu	Phe 590
Val	Gly	Leu 595	Arg	Asp	Gly	Val	Leu 600	Arg	Val	Pro	Leu	Glu	Arg	Cys	Ala 605
Ala	Tyr	Arg	Ser	Gln	Gly	Ala 615	Cys	Leu	Gly	Ala	Arg 620	Asp	Pro	Tyr	Cys

Gly Trp Asp Gly Lys Gln Gln Arg Cys Ser Thr Leu Glu Asp Ser Ser
 625 630 635 640
 Asn Met Ser Leu Trp Thr Gln Asn Ile Thr Ala Cys Pro Val Arg Asn
 645 650 655
 Val Thr Arg Asp Gly Gly Phe Gly Pro Trp Ser Pro Trp Gln Pro Cys
 660 665 670
 Glu His Leu Asp Gly Asp Asn Ser Gly Ser Cys Leu Cys Arg Ala Arg
 675 680 685
 Ser Cys Asp Ser Pro Arg Pro Arg Cys Gly Gly Leu Asp Cys Leu Gly
 690 695 700
 Pro Ala Ile His Ile Ala Asn Cys Ser Arg Asn Gly Ala Val Asp Pro
 705 710 715 720
 Val Val Ile Val Gly Arg Cys Ala Ala Thr Ser Cys Gly Ile Gly Phe
 725 730 735
 Gln Val Arg Gln Arg Ser Cys Ser Asn Pro Ala Pro Arg His Gly Gly
 740 745 750
 Arg Ile Cys Val Gly Lys Ser Arg Glu Glu Arg Phe Cys Asn Glu Asn
 755 760 765
 Thr Pro Cys Pro Val Pro Ile Phe Trp Ala Ser Trp Gly Ser Trp Ser
 770 775 780
 Lys Cys Ser Ser Asn Cys Gly Gly Gly Met Gln Ser Arg Arg Arg Ala
 785 790 795 800
 Cys Glu Asn Gly Asn Ser Cys Leu Gly Cys Gly Val Glu Phe Lys Thr
 805 810 815
 Cys Asn Pro Glu Gly Cys Pro Glu Val Arg Arg Asn Thr Pro Trp Thr
 820 825 830
 Pro Trp Leu Pro Val Asn Val Thr Gln Gly Gly Ala Arg Gln Glu Gln
 835 840 845
 Arg Phe Arg Phe Thr Cys Arg Ala Pro Leu Ala Asp Pro His Gly Leu
 850 855 860
 Gln Phe Gly Arg Arg Arg Thr Glu Thr Arg Thr Cys Pro Ala Asp Gly
 865 870 875 880
 Ser Gly Ser Cys Asp Thr Asp Ala Leu Val Glu Val Leu Leu Arg Ser
 885 890 895
 Gly Ser Thr Ser Pro His Thr Val Ser Gly Gly Trp Ala Ala Trp Gly
 900 905 910
 Pro Trp Ser Ser Cys Ser Arg Asp Cys Glu Leu Gly Phe Arg Val Arg
 915 920 925
 Lys Arg Thr Cys Thr Asn Pro Glu Pro Arg Asn Gly Gly Leu Pro Cys
 930 935 940

Val Gly Asp Ala Ala Glu Tyr Gln Asp Cys Asn Pro Gln Ala Cys Pro
 945 950 955 960
 Val Arg Gly Ala Trp Ser Cys Trp Thr Ser Trp Ser Pro Cys Ser Ala
 965 970 975
 Ser Cys Gly Gly Gly His Tyr Gln Arg Thr Arg Ser Cys Thr Ser Pro
 980 985 990
 Ala Pro Ser Pro Gly Glu Asp Ile Cys Leu Gly Leu His Thr Glu Glu
 995 1000 1005
 Ala Leu Cys Ala Thr Gln Ala Cys Pro Glu Gly Trp Ser Pro Trp
 1010 1015 1020
 Ser Glu Trp Ser Lys Cys Thr Asp Asp Gly Ala Gln Ser Arg Ser
 1025 1030 1035
 Arg His Cys Glu Glu Leu Leu Pro Gly Ser Ser Ala Cys Ala Gly
 1040 1045 1050
 Asn Ser Ser Gln Ser Arg Pro Cys Pro Tyr Ser Glu Ile Arg Val
 1055 1060 1065
 Ile Leu Pro Ala Ser Ser Met Glu Glu Ala Thr Asp Cys Ala Gly
 1070 1075 1080
 Phe Asn Leu Ile His Leu Val Ala Thr Gly Ile Ser Cys Phe Leu
 1085 1090 1095
 Gly Ser Gly Leu Leu Thr Leu Ala Val Tyr Leu Ser Cys Gln His
 1100 1105 1110
 Cys Gln Arg Gln Ser Gln Glu Ser Thr Leu Val His Pro Ala Thr
 1115 1120 1125
 Pro Asn His Leu His Tyr Lys Gly Gly Gly Thr Pro Lys Asn Glu
 1130 1135 1140
 Lys Tyr Thr Pro Met Glu Phe Lys Thr Leu Asn Lys Asn Asn Leu
 1145 1150 1155
 Ile Pro Asp Asp Arg Ala Asn Phe Tyr Pro Leu Gln Gln Thr Asn
 1160 1165 1170
 Ala Ser Ala Gly Tyr Pro Pro Leu Pro Gly Ser Leu Tyr Ser Thr
 1175 1180 1185
 Gln Gly Ile Pro Leu Val Arg Gly Ser Glu Tyr Trp Glu Leu Glu
 1190 1195 1200
 Ala Asp Leu Cys Leu Glu Val Leu
 1205 1210

<210> 12
 <211> 1203
 <212> PRT
 <213> Homo sapiens
 <400> 12

Ala Ala Ala Pro Phe Pro Asp Arg Pro Pro Ala His Leu Val Ser Ser
 1 5 10 15
 Arg Arg Ser Ala Pro Pro Gly Ser Arg Glu Pro Arg Gly Thr Gly His
 20 25 30
 Leu His Pro Pro Leu Gly Val Ser Gly Ser Ser Trp Cys Leu Ala Cys
 35 40 45
 Val Ser Trp Met Pro Cys Gly Phe Ser Pro Ser Pro Val Ala His His
 50 55 60
 Leu Val Pro Gly Pro Pro Asp Thr Pro Ala Gln Gln Leu Arg Cys Gly
 65 70 75 80
 Trp Thr Val Gly Gly Trp Leu Leu Ser Leu Val Arg Gly Leu Leu Pro
 85 90 95
 Cys Leu Pro Pro Gly Ala Arg Thr Ala Glu Gly Pro Ile Met Val Leu
 100 105 110
 Ala Gly Pro Leu Ala Val Ser Leu Leu Leu Pro Ser Leu Thr Leu Leu
 115 120 125
 Val Ser His Leu Ser Ser Ser Gln Asp Val Ser Ser Glu Pro Ser Ser
 130 135 140
 Glu Gln Gln Leu Cys Ala Leu Ser Lys His Pro Thr Val Ala Phe Glu
 145 150 155 160
 Asp Leu Gln Pro Trp Val Ser Asn Phe Thr Tyr Pro Gly Ala Arg Asp
 165 170 175
 Phe Ser Gln Leu Ala Leu Asp Pro Ser Gly Asn Gln Leu Ile Val Gly
 180 185 190
 Ala Arg Asn Tyr Leu Phe Arg Leu Ser Leu Ala Asn Val Ser Leu Leu
 195 200 205
 Gln Ala Thr Glu Trp Ala Ser Ser Glu Asp Thr Arg Arg Ser Cys Gln
 210 215 220
 Ser Lys Gly Lys Thr Glu Glu Glu Cys Gln Asn Tyr Val Arg Val Leu
 225 230 235 240
 Ile Val Ala Gly Arg Lys Val Phe Met Cys Gly Thr Asn Ala Phe Ser
 245 250 255
 Pro Met Cys Thr Ser Arg Gln Val Gly Asn Leu Ser Arg Thr Thr Glu
 260 265 270
 Lys Ile Asn Gly Val Ala Arg Cys Pro Tyr Asp Pro Arg His Asn Ser
 275 280 285
 Thr Ala Val Ile Ser Ser Gln Gly Glu Leu Tyr Ala Ala Thr Val Ile
 290 295 300
 Asp Phe Ser Gly Arg Asp Pro Ala Ile Tyr Arg Ser Leu Gly Ser Gly
 305 310 315 320
 Pro Pro Leu Arg Thr Ala Gln Tyr Asn Ser Lys Trp Leu Asn Glu Pro

325										330					335				
Asn	Phe	Val	Ala	Ala	Tyr	Asp	Ile	Gly	Leu	Phe	Ala	Tyr	Phe	Phe	Leu				
			340					345					350						
Arg	Glu	Asn	Ala	Val	Glu	His	Asp	Cys	Gly	Arg	Thr	Val	Tyr	Ser	Arg				
		355					360					365							
Val	Ala	Arg	Val	Cys	Lys	Asn	Asp	Val	Gly	Gly	Arg	Phe	Leu	Leu	Glu				
	370					375					380								
Asp	Thr	Trp	Thr	Thr	Phe	Met	Lys	Ala	Arg	Leu	Asn	Cys	Ser	Arg	Pro				
385					390					395					400				
Gly	Glu	Val	Pro	Phe	Tyr	Tyr	Asn	Glu	Leu	Gln	Ser	Ala	Phe	His	Leu				
				405				410						415					
Pro	Glu	Gln	Asp	Leu	Ile	Tyr	Gly	Val	Phe	Thr	Thr	Asn	Val	Asn	Ser				
			420				425						430						
Ile	Ala	Ala	Ser	Ala	Val	Cys	Ala	Phe	Asn	Leu	Ser	Ala	Ile	Ser	Gln				
	435						440					445							
Ala	Phe	Asn	Gly	Pro	Phe	Arg	Tyr	Gln	Glu	Asn	Pro	Arg	Ala	Ala	Trp				
	450					455					460								
Leu	Pro	Ile	Ala	Asn	Pro	Ile	Pro	Asn	Phe	Gln	Cys	Gly	Thr	Leu	Pro				
465					470					475					480				
Glu	Thr	Gly	Pro	Asn	Glu	Asn	Leu	Thr	Glu	Arg	Ser	Leu	Gln	Asp	Ala				
				485					490					495					
Gln	Arg	Leu	Phe	Leu	Met	Ser	Glu	Ala	Val	Gln	Pro	Val	Thr	Pro	Glu				
			500					505					510						
Pro	Cys	Val	Thr	Gln	Asp	Ser	Val	Arg	Phe	Ser	His	Leu	Val	Val	Asp				
		515					520					525							
Leu	Val	Gln	Ala	Lys	Asp	Thr	Leu	Tyr	His	Val	Leu	Tyr	Ile	Gly	Thr				
	530					535					540								
Glu	Ser	Gly	Thr	Ile	Leu	Lys	Ala	Leu	Ser	Thr	Ala	Ser	Arg	Ser	Leu				
545					550					555					560				
His	Gly	Cys	Tyr	Leu	Glu	Glu	Leu	His	Val	Leu	Pro	Pro	Gly	Arg	Arg				
				565					570					575					
Glu	Pro	Leu	Arg	Ser	Leu	Arg	Ile	Leu	His	Ser	Ala	Arg	Ala	Leu	Phe				
			580					585					590						
Val	Gly	Leu	Arg	Asp	Gly	Val	Leu	Arg	Val	Pro	Leu	Glu	Arg	Cys	Ala				
		595					600					605							
Ala	Tyr	Arg	Ser	Gln	Gly	Ala	Cys	Leu	Gly	Ala	Arg	Asp	Pro	Tyr	Cys				
	610					615					620								
Gly	Trp	Asp	Gly	Lys	Gln	Gln	Arg	Cys	Ser	Thr	Leu	Glu	Asp	Ser	Ser				
625					630					635					640				
Asn	Met	Ser	Leu	Trp	Thr	Gln	Asn	Ile	Thr	Ala	Cys	Pro	Val	Arg	Asn				
				645					650					655					

Val Thr Arg Asp Gly Gly Phe Gly Pro Trp Ser Pro Trp Gln Pro Cys
 660 665 670
 Glu His Leu Asp Gly Asp Asn Ser Gly Ser Cys Leu Cys Arg Ala Arg
 675 680 685
 Ser Cys Asp Ser Pro Arg Pro Arg Cys Gly Gly Leu Asp Cys Leu Gly
 690 695 700
 Pro Ala Ile His Ile Ala Asn Cys Ser Arg Asn Gly Ala Val Asp Pro
 705 710 715 720
 Val Val Ile Val Gly Arg Cys Ala Ala Thr Ser Cys Gly Ile Gly Phe
 725 730 735
 Gln Val Arg Gln Arg Ser Cys Ser Asn Pro Ala Pro Arg His Gly Gly
 740 745 750
 Arg Ile Cys Val Gly Lys Ser Arg Glu Glu Arg Phe Cys Asn Glu Asn
 755 760 765
 Thr Pro Cys Pro Val Pro Ile Phe Trp Ala Ser Trp Gly Ser Trp Ser
 770 775 780
 Lys Cys Ser Ser Asn Cys Gly Gly Gly Met Gln Ser Arg Arg Arg Ala
 785 790 795 800
 Cys Glu Asn Gly Asn Ser Cys Leu Gly Cys Gly Val Glu Phe Lys Thr
 805 810 815
 Cys Asn Pro Glu Gly Cys Pro Glu Val Arg Arg Asn Thr Pro Trp Thr
 820 825 830
 Pro Trp Leu Pro Val Asn Val Thr Gln Gly Gly Ala Arg Gln Glu Gln
 835 840 845
 Arg Phe Arg Phe Thr Cys Arg Ala Pro Leu Ala Asp Pro His Gly Leu
 850 855 860
 Gln Phe Gly Arg Arg Arg Thr Glu Thr Arg Thr Cys Pro Ala Asp Gly
 865 870 875 880
 Ser Gly Ser Cys Asp Thr Asp Ala Leu Val Glu Val Leu Leu Arg Ser
 885 890 895
 Gly Ser Thr Ser Pro His Thr Val Ser Gly Gly Trp Ala Ala Trp Gly
 900 905 910
 Pro Trp Ser Ser Cys Ser Arg Asp Cys Glu Leu Gly Phe Arg Val Arg
 915 920 925
 Lys Arg Thr Cys Thr Asn Pro Glu Pro Arg Asn Gly Gly Leu Pro Cys
 930 935 940
 Val Gly Asp Ala Ala Glu Tyr Gln Asp Cys Asn Pro Gln Ala Cys Pro
 945 950 955 960
 Val Arg Gly Ala Trp Ser Cys Trp Thr Ser Trp Ser Pro Cys Ser Ala
 965 970 975

Ser Cys Gly Gly Gly His Tyr Gln Arg Thr Arg Ser Cys Thr Ser Pro
 980 985 990
 Ala Pro Ser Pro Gly Glu Asp Ile Cys Leu Gly Leu His Thr Glu Glu
 995 1000 1005
 Ala Leu Cys Ala Thr Gln Ala Cys Pro Glu Gly Trp Ser Pro Trp
 1010 1015 1020
 Ser Glu Trp Ser Lys Cys Thr Asp Asp Gly Ala Gln Ser Arg Ser
 1025 1030 1035
 Arg His Cys Glu Glu Leu Leu Pro Gly Ser Ser Ala Cys Ala Gly
 1040 1045 1050
 Asn Ser Ser Gln Ser Arg Pro Cys Pro Tyr Ser Glu Ile Arg Val
 1055 1060 1065
 Ile Leu Pro Ala Ser Ser Met Glu Glu Ala Thr Asp Cys Ala Gly
 1070 1075 1080
 Phe Asn Leu Ile His Leu Val Ala Thr Gly Ile Ser Cys Phe Leu
 1085 1090 1095
 Gly Ser Gly Leu Leu Thr Leu Ala Val Tyr Leu Ser Cys Gln His
 1100 1105 1110
 Cys Gln Arg Gln Ser Gln Glu Ser Thr Leu Val His Pro Ala Thr
 1115 1120 1125
 Pro Asn His Leu His Tyr Lys Gly Gly Gly Thr Pro Lys Asn Glu
 1130 1135 1140
 Lys Tyr Thr Pro Met Glu Phe Lys Thr Leu Asn Lys Asn Asn Leu
 1145 1150 1155
 Ile Pro Asp Asp Arg Ala Asn Phe Tyr Pro Leu Gln Gln Thr Asn
 1160 1165 1170
 Val Tyr Thr Thr Thr Tyr Tyr Pro Ser Pro Leu Asn Lys His Ser
 1175 1180 1185
 Phe Arg Pro Glu Ala Ser Pro Gly Gln Arg Cys Phe Pro Asn Ser
 1190 1195 1200

<210> 13
 <211> 1240
 <212> PRT
 <213> Homo sapiens

<400> 13
 Ala Ala Ala Pro Phe Pro Asp Arg Pro Pro Ala His Leu Val Ser Ser
 1 5 10 15
 Arg Arg Ser Ala Pro Pro Gly Ser Arg Glu Pro Arg Gly Thr Gly His
 20 25 30
 Leu His Pro Pro Leu Gly Val Ser Gly Ser Ser Trp Cys Leu Ala Cys
 35 40 45

Val Ser Trp Met Pro Cys Gly Phe Ser Pro Ser Pro Val Ala His His
 50 55 60
 Leu Val Pro Gly Pro Pro Asp Thr Pro Ala Gln Gln Leu Arg Cys Gly
 65 70 75 80
 Trp Thr Val Gly Gly Trp Leu Leu Ser Leu Val Arg Gly Arg Lys Pro
 85 90 95
 Ser Gly Asp Phe Glu Trp Arg Gln Gly Trp Arg Gly Pro Gly Glu Glu
 100 105 110
 Asp Trp Pro Glu Ser Pro Ser Pro Lys Val Leu Met Asp Ser Ala Gly
 115 120 125
 Gly Leu Leu Pro Cys Leu Pro Pro Gly Ala Arg Thr Ala Glu Gly Pro
 130 135 140
 Ile Met Val Leu Ala Gly Pro Leu Ala Val Ser Leu Leu Leu Pro Ser
 145 150 155 160
 Leu Thr Leu Leu Val Ser His Leu Ser Ser Ser Gln Asp Val Ser Ser
 165 170 175
 Glu Pro Ser Ser Glu Gln Gln Leu Cys Ala Leu Ser Lys His Pro Thr
 180 185 190
 Val Ala Phe Glu Asp Leu Gln Pro Trp Val Ser Asn Phe Thr Tyr Pro
 195 200 205
 Gly Ala Arg Asp Phe Ser Gln Leu Ala Leu Asp Pro Ser Gly Asn Gln
 210 215 220
 Leu Ile Val Gly Ala Arg Asn Tyr Leu Phe Arg Leu Ser Leu Ala Asn
 225 230 235 240
 Val Ser Leu Leu Gln Ala Thr Glu Trp Ala Ser Ser Glu Asp Thr Arg
 245 250 255
 Arg Ser Cys Gln Ser Lys Gly Lys Thr Glu Glu Glu Cys Gln Asn Tyr
 260 265 270
 Val Arg Val Leu Ile Val Ala Gly Arg Lys Val Phe Met Cys Gly Thr
 275 280 285
 Asn Ala Phe Ser Pro Met Cys Thr Ser Arg Gln Val Gly Asn Leu Ser
 290 295 300
 Arg Thr Thr Glu Lys Ile Asn Gly Val Ala Arg Cys Pro Tyr Asp Pro
 305 310 315 320
 Arg His Asn Ser Thr Ala Val Ile Ser Ser Gln Gly Glu Leu Tyr Ala
 325 330 335
 Ala Thr Val Ile Asp Phe Ser Gly Arg Asp Pro Ala Ile Tyr Arg Ser
 340 345 350
 Leu Gly Ser Gly Pro Pro Leu Arg Thr Ala Gln Tyr Asn Ser Lys Trp
 355 360 365

Leu Asn Glu Pro Asn Phe Val Ala Ala Tyr Asp Ile Gly Leu Phe Ala
 370 375 380
 Tyr Phe Phe Leu Arg Glu Asn Ala Val Glu His Asp Cys Gly Arg Thr
 385 390 395 400
 Val Tyr Ser Arg Val Ala Arg Val Cys Lys Asn Asp Val Gly Gly Arg
 405 410 415
 Phe Leu Leu Glu Asp Thr Trp Thr Thr Phe Met Lys Ala Arg Leu Asn
 420 425 430
 Cys Ser Arg Pro Gly Glu Val Pro Phe Tyr Tyr Asn Glu Leu Gln Ser
 435 440 445
 Ala Phe His Leu Pro Glu Gln Asp Leu Ile Tyr Gly Val Phe Thr Thr
 450 455 460
 Asn Val Asn Ser Ile Ala Ala Ser Ala Val Cys Ala Phe Asn Leu Ser
 465 470 475 480
 Ala Ile Ser Gln Ala Phe Asn Gly Pro Phe Arg Tyr Gln Glu Asn Pro
 485 490 495
 Arg Ala Ala Trp Leu Pro Ile Ala Asn Pro Ile Pro Asn Phe Gln Cys
 500 505 510
 Gly Thr Leu Pro Glu Thr Gly Pro Asn Glu Asn Leu Thr Glu Arg Ser
 515 520 525
 Leu Gln Asp Ala Gln Arg Leu Phe Leu Met Ser Glu Ala Val Gln Pro
 530 535 540
 Val Thr Pro Glu Pro Cys Val Thr Gln Asp Ser Val Arg Phe Ser His
 545 550 555 560
 Leu Val Val Asp Leu Val Gln Ala Lys Asp Thr Leu Tyr His Val Leu
 565 570 575
 Tyr Ile Gly Thr Glu Ser Gly Thr Ile Leu Lys Ala Leu Ser Thr Ala
 580 585 590
 Ser Arg Ser Leu His Gly Cys Tyr Leu Glu Glu Leu His Val Leu Pro
 595 600 605
 Pro Gly Arg Arg Glu Pro Leu Arg Ser Leu Arg Ile Leu His Ser Ala
 610 615 620
 Arg Ala Leu Phe Val Gly Leu Arg Asp Gly Val Leu Arg Val Pro Leu
 625 630 635 640
 Glu Arg Cys Ala Ala Tyr Arg Ser Gln Gly Ala Cys Leu Gly Ala Arg
 645 650 655
 Asp Pro Tyr Cys Gly Trp Asp Gly Lys Gln Gln Arg Cys Ser Thr Leu
 660 665 670
 Glu Asp Ser Ser Asn Met Ser Leu Trp Thr Gln Asn Ile Thr Ala Cys
 675 680 685
 Pro Val Arg Asn Val Thr Arg Asp Gly Gly Phe Gly Pro Trp Ser Pro

690	695	700
Trp Gln Pro Cys Glu His Leu Asp Gly Asp Asn Ser Gly Ser Cys Leu 705 710 715 720		
Cys Arg Ala Arg Ser Cys Asp Ser Pro Arg Pro Arg Cys Gly Gly Leu 725 730 735		
Asp Cys Leu Gly Pro Ala Ile His Ile Ala Asn Cys Ser Arg Asn Gly 740 745 750		
Gly Arg Gly Pro Arg Gly Ala Ser Trp Ala Ala Val Gln Ala Arg Pro 755 760 765		
Val Ala Ser Gly Phe Gln Val Arg Gln Arg Ser Cys Ser Asn Pro Ala 770 775 780		
Pro Arg His Gly Gly Arg Ile Cys Val Gly Lys Ser Arg Glu Glu Arg 785 790 795 800		
Phe Cys Asn Glu Asn Thr Pro Cys Pro Val Pro Ile Phe Trp Ala Ser 805 810 815		
Trp Gly Ser Trp Ser Lys Cys Ser Ser Asn Cys Gly Gly Gly Met Gln 820 825 830		
Ser Arg Arg Arg Ala Cys Glu Asn Gly Asn Ser Cys Leu Gly Cys Gly 835 840 845		
Val Glu Phe Lys Thr Cys Asn Pro Glu Gly Cys Pro Glu Val Arg Arg 850 855 860		
Asn Thr Pro Trp Thr Pro Trp Leu Pro Val Asn Val Thr Gln Gly Gly 865 870 875 880		
Ala Arg Gln Glu Gln Arg Phe Arg Phe Thr Cys Arg Ala Pro Leu Ala 885 890 895		
Asp Pro His Gly Leu Gln Phe Gly Arg Arg Arg Thr Glu Thr Arg Thr 900 905 910		
Cys Pro Ala Asp Gly Ser Gly Ser Cys Asp Thr Asp Ala Leu Val Glu 915 920 925		
Val Leu Leu Arg Ser Gly Ser Thr Ser Pro His Thr Val Ser Gly Gly 930 935 940		
Trp Ala Ala Trp Gly Pro Trp Ser Ser Cys Ser Arg Asp Cys Glu Leu 945 950 955 960		
Gly Phe Arg Val Arg Lys Arg Thr Cys Thr Asn Pro Glu Pro Arg Asn 965 970 975		
Gly Gly Leu Pro Cys Val Gly Asp Ala Ala Glu Tyr Gln Asp Cys Asn 980 985 990		
Pro Gln Ala Cys Pro Val Arg Gly Ala Trp Ser Cys Trp Thr Ser Trp 995 1000 1005		
Ser Pro Cys Ser Ala Ser Cys Gly Gly Gly His Tyr Gln Arg Thr 1010 1015 1020		

Arg Ser Cys Thr Ser Pro Ala Pro Ser Pro Gly Glu Asp Ile Cys
 1025 1030 1035
 Leu Gly Leu His Thr Glu Glu Ala Leu Cys Ala Thr Gln Ala Cys
 1040 1045 1050
 Pro Glu Gly Trp Ser Pro Trp Ser Glu Trp Ser Lys Cys Thr Asp
 1055 1060 1065
 Asp Gly Ala Gln Ser Arg Ser Arg His Cys Glu Glu Leu Leu Pro
 1070 1075 1080
 Gly Ser Ser Ala Cys Ala Gly Asn Ser Ser Gln Ser Arg Pro Cys
 1085 1090 1095
 Pro Tyr Ser Glu Ile Arg Val Ile Leu Pro Ala Ser Ser Met Glu
 1100 1105 1110
 Glu Ala Thr Asp Cys Ala Gly Phe Asn Leu Ile His Leu Val Ala
 1115 1120 1125
 Thr Gly Ile Ser Cys Phe Leu Gly Ser Gly Leu Leu Thr Leu Ala
 1130 1135 1140
 Val Tyr Leu Ser Cys Gln His Cys Gln Arg Gln Ser Gln Glu Ser
 1145 1150 1155
 Thr Leu Val His Pro Ala Thr Pro Asn His Leu His Tyr Lys Gly
 1160 1165 1170
 Gly Gly Thr Pro Lys Asn Glu Lys Tyr Thr Pro Met Glu Phe Lys
 1175 1180 1185
 Thr Leu Asn Lys Asn Asn Leu Ile Pro Asp Asp Arg Ala Asn Phe
 1190 1195 1200
 Tyr Pro Leu Gln Gln Thr Asn Val Tyr Thr Thr Thr Tyr Tyr Pro
 1205 1210 1215
 Ser Pro Leu Asn Lys His Ser Phe Arg Pro Glu Ala Ser Pro Gly
 1220 1225 1230
 Gln Arg Cys Phe Pro Asn Ser
 1235 1240

<210> 14
 <211> 4567
 <212> DNA
 <213> Homo sapiens

<400> 14
 gcggccgccc cattcccaga ccggccgccca gcccatctgg ttagctcccg ccgctccgcg 60
 ccgcccggga gtcgggagcc gcggggaacc gggcacctgc accgcctct gggagtgagt 120
 ggttccagct ggtgcctggc ctgtgtctct tggatgccct gtggcttcag tccgtctcct 180
 gtgcccacc acctcgctcc tgggcccgcct gataccccag cccaacagct aagggtgtgga 240
 tggacagtag ggggctggct tctctcactg gtcagggggtc ttctcccctg tctgcctccc 300
 ggagctagga ctgcagaggg gcctatcatg gtgcttgtag gccccctggc tgtctcgctg 360
 ttgctgcccga gcctcacact gctggtgtcc cacctctcca gctcccagga tgtctccagt 420
 gagcccagca gtgagcagca gctgtgcgcc cttagcaagc accccaccgt ggcctttgaa 480

gacctgcagc	cgtgggtctc	taacttcacc	taccttgag	cccgggattt	ctcccagctg	540
gctttggacc	cctccgggaa	ccagctcatc	gtgggagcca	ggaactacct	cttcagactc	600
agccttgcca	atgtctctct	tcttcaggcc	acagagtggg	cctccagtga	ggacacgcgc	660
cgctcctgcc	aaagcaaagg	gaagactgag	gaggagtgtc	agaactacgt	gcgagtcctg	720
atcgctcgccg	gccggaaagg	gttcatgtgt	ggaaccaatg	ccttttcccc	catgtgcacc	780
agcagacagg	tggggaacct	cagccggact	actgagaaga	tcaatgggtg	ggcccgcctg	840
ccctatgacc	cacgccacaa	ctccacagct	gtcatctcct	cccaggggga	gctctatgca	900
gccacgggtca	tcgacttctc	aggtcgggac	cctgccatct	accgcagcct	gggcagtggg	960
ccaccgcttc	gcactgcccc	atataactcc	aagtggctta	atgagccaaa	cttcgtggca	1020
gcctatgata	ttgggctgtt	tgcatacttc	ttcctgcggg	agaacgcagt	ggagcacgac	1080
tgtggacgca	ccgtgtactc	tcgcgtggcc	cgctgtgca	agaatgacgt	ggggggccga	1140
ttcctgctgg	aggacacatg	gaccacattc	atgaaggccc	ggctcaactg	ctcccgcccg	1200
ggcgaggtcc	ccttctacta	taacgagctg	cagagtgcct	tccacttgcc	agagcaggac	1260
ctcatctatg	gagttttcac	aaccaacgta	aacagcatcg	cggcttctgc	tgtctgcgcc	1320
ttcaacctca	gtgctatctc	ccaggctttc	aatggcccat	ttcgtacca	ggagaacccc	1380
agggctgcct	ggctcccat	agccaacccc	atccccaatt	tccagtgtgg	cacctgcct	1440
gagaccggtc	ccaacgagaa	cctgacggag	cgagcctgc	aggacgcgca	gcgcctcttc	1500
ctgatgagcg	aggccgtgca	gccggtgaca	cccagccct	gtgtcaccca	ggacagcgtg	1560
cgcttctcac	acctcggtg	ggacctggtg	caggctaaag	acacgctcta	ccatgtactc	1620
tacattggca	ccgagtcggg	caccatcctg	aaggcgctgt	ccacggcgag	ccgcagcctc	1680
cacggctgct	acctggagga	gctgcacgtg	ctgcccccg	ggcgccgcga	gcccctgcgc	1740
agcctgcgca	tcctgcacag	cgcccgcgcg	ctcttcgtgg	ggctgagaga	cgcgctcctg	1800
cggtgccac	tggagaggtg	cgccgcctac	cgacgccagg	gggcatgcct	ggggggcccg	1860
gacccgtact	gtggctggga	cggaagcag	caacgttgca	gcacactcga	ggacagctcc	1920
aacatgagcc	tctggacca	gaacatcacc	gcctgtcctg	tgcggaatgt	gacacgggat	1980
gggggggtcg	gcccattggtc	accatggcaa	ccatgtgagc	acttggatgg	ggacaactca	2040
ggctcttgcc	tgtgtcgagc	tcgatcctgt	gattccccct	gaccccgctg	tggggcgctt	2100
gactgcctgg	ggccagccat	ccacatcgcc	aactgttcca	ggaatggggc	gtggaccctg	2160
tggtcacgt	gggcgctgtg	cagcacgtcc	tgtggcatcg	gcttccaggt	ccgccagcga	2220
agttgcagca	acctgtctcc	ccgccacggg	ggccgcctct	gcgtgggcaa	gagccgggag	2280
gaacggttct	gtaatgagaa	cacgccttgc	ccggtgcccc	tcttctgggc	tccttggggc	2340
tcctggagca	agtgcagcag	caactgtgga	gggggcatgc	agtcgcggcg	tcgggcctgc	2400
gagaacggca	actcctgcct	gggctgcggc	gtggagttca	agacgtgcaa	ccccgagggc	2460
tgccccgaag	tgcggcgcaa	caccccttgg	acgccgtggc	tgcccgtaag	cgtgacgcag	2520
ggcggggcac	ggcaggagca	gcggttcgc	ttcacctgcc	gcgcgcccc	tgcagaccgc	2580
cacggcctgc	agttcggcag	gagaaggacc	gagacgagga	cctgtcccg	ggacggctcc	2640
ggctcctgcg	acaccgacgc	cctggtggag	gtcctcctgc	gcagcgggag	cacctccccg	2700
cacacggtga	gcgggggctg	ggccgcctgg	ggcccggtgt	cgtcctgctc	ccgggactgc	2760
gagctgggct	tccgcgtccg	caagagaacg	tgcactaacc	cggagccccg	caacgggggc	2820
ctgccctgcg	tgggcgatgc	tgccgagtac	caggactgca	acccccaggc	ttgccagtt	2880
cggggtgctt	ggtcctgctg	gacctcatgg	tctccatgct	cagcttccctg	tgggtggggg	2940
cactatcaac	gcacccgttc	ctgcaccagc	cccgacacct	ccccaggtga	ggacatctgt	3000
ctcgggctgc	acacggagga	ggcactatgt	gccacagagg	cctgcccaga	aggctggtcg	3060
ccctgggtctg	agtggagtaa	gtgcactgac	gcagcagccc	agagccgaag	ccggcagctg	3120
gaggagctcc	tcccagggtc	cagcgcmtgt	gctggaaaca	gcagccagag	ccgcccctgc	3180
ccctacagcg	agattcscgt	catcctgcca	gcctccagca	tggaggaggc	caccgactgt	3240
gcagggttca	atctcatcca	cttgggtggc	acgggcctct	cctgcttctt	gggctctggg	3300
ctcctgaccc	tagcagtgtg	cctgtcttgc	cagcactgcc	agcgtcagtc	ccaggagtcc	3360
acactggtcc	atcctgccac	ccccaacct	ttgactaca	agggcgagg	caccccgaag	3420
aatgaaaagt	acacacccat	ggaattcaag	accctgaaca	agaataactt	gatccctgat	3480
gacagagcca	acttctaccc	attgcagcag	accaatgtgt	acacgactac	ttactaccca	3540
agccccctga	acaaacacag	cttccggccc	gaggcctcac	ctggacaacg	gtgcttcccc	3600
aacagctgat	accgccgtcc	tggggacttg	ggcttcttgc	cttcataagg	cacagagcag	3660
atggagatgg	gacagtggag	ccagtgttgt	tttctccctc	tgcactaggc	caagaacttg	3720
ctgccttgcc	tgtggggggg	cccatccggc	ttcagagagc	tctggctggc	attgaccatg	3780
ggggaaaagg	ctggtttcag	gctgacatat	ggccgcagg	ccagttcagc	ccaggtctmt	3840
catggttatc	ttccaaccca	ctgtcacgct	gacactatgc	tgccatgcct	gggctgtgga	3900
cctactgggc	atttgaggaa	ytggagaatg	gagatggcaa	gagggcaggc	ttttaagttt	3960
gggttgagga	caacttctctg	tggccccac	aagctgagtc	tggccttctc	cagctggccc	4020
caaaaaaggc	ctttgctaca	tcctgattat	ctctgaaagt	aatcaatcaa	gtggctccag	4080
tagctctgga	ttttctgcca	gggctggggc	attgtggtgc	tgccccagta	tgacatggga	4140

ccaaggccag	cgcaggttat	ccacctctgc	ctggaagtct	atactctacc	cagggcatcc	4200
ctctggctag	aggcagttag	tactgggaac	tggaggctga	cctgtgctta	gaagtccttt	4260
aatctgggct	ggtacaggcc	tcagccttgc	cctcaatgca	cgaaagggtg	cccaggagag	4320
aggatcaatg	ccataggagg	cagaagtctg	gcctctgtgc	ctctatggag	actatcttcc	4380
agttgctgct	caacagagtt	gttggctgag	acctgcttgg	gagtcctctgc	tggcccttca	4440
tctgttcagg	aacacacaca	cacacacact	cacacacgca	cacacaatca	caatttgcta	4500
cagcaacaaa	aaagacattg	ggctgtggca	ttattaatta	aagatgatat	ccagtcaaaa	4560
aaaaact						4567

<210> 15
 <211> 453
 <212> DNA
 <213> Homo sapiens

<400> 15	
agtaatcagc	tcggtaccgg
aagtctatac	tctaccag
ggctgacctg	tgcttagaag
aatgcacgaa	aggtggccca
ctgtgcctct	atggagacta
gcttgggagt	ctctgctggc
cacgcacaca	caatcacaat
taattaaaga	tgatatccag
	tcaaaaaaaa
	act

<210> 16
 <211> 4675
 <212> DNA
 <213> Homo sapiens

<400> 16	
gcggccgccc	cattcccaga
ccgcccggga	gtcgggagcc
ggttccagct	ggtgcctggc
gttgcccacc	acctcgtccc
tggacagtag	ggggctggct
gaatggaggc	aaggatggag
aaggtcctca	tggactgagc
gcagaggggc	ctatcatggt
ctcacactgc	tgggtgtccc
gagcagcagc	tgtgcgccct
tgggtctcta	acttcaccta
tccgggaacc	agctcatcgt
gtctctcttc	ttcaggccac
agcaaaggga	agactgagga
cggagaggtg	tcatgtgtgg
gggaacctca	gccggactac
cgccacaact	ccacagctgt
gacttctcag	gtcgggaccc
actgcccatt	ataactccaa
gggtctgttt	catacttctt
gtgtactctc	gcgtggcccg
gacacatgga	ccacattcat
ttctactata	acgagctgca
gttttcacaa	ccaacgtaaa
gctatctccc	aggctttcaa
ctcccatag	ccaaccccat
aacgagaacc	tgacggagcg
gccgtgcagc	cggtgacacc
ctcgtggtgg	acctggtgca
	ggctaaagac
	acgctctacc
	atgtactcta
	cattggcacc

gagtcgggca	ccatcctgaa	ggcgtgtcc	acggcgagcc	gcagcctcca	cggctgctac	1800
ctggaggagc	tgcacgtgct	gcccccggg	cgccgcgagc	ccctgcgcag	cctgcgcac	1860
ctgcacagcg	cccgcgcgct	cttcgtgggg	ctgagagacg	gcgtcctgcg	ggtcccaactg	1920
gagaggtgcg	ccgcctaccg	cagccagggg	gcatgcctgg	gggcccggga	cccgtactgt	1980
ggctgggacg	ggaagcagca	acgttgacgc	acactcgagg	acagctccaa	catgagcctc	2040
tggacccaga	acatcaccgc	ctgtcctgtg	cggaaatgtga	cacgggatgg	gggtctcggc	2100
ccatggtcac	catggcaacc	atgtgagcac	ttggatgggg	acaactcagg	ctcttgccctg	2160
tgtcgagctc	gatcctgtga	ttccccctga	ccccgctgtg	ggggccttga	ctgcctgggg	2220
ccagccatcc	acatcgccaa	ctgctccagg	aatggggcgt	ggaccccgtg	gtcatcgtgg	2280
gcgctgtgca	gcacgtcctg	tggcatcggc	ttccaggctc	gccagcgaag	ttgcagcaac	2340
cctgctcccc	gccacggggg	ccgcatctgc	gtgggcaaga	gccgggagga	acggttctgt	2400
aatgagaaca	cgccttgccc	ggtgcccatc	ttctgggctt	cctggggctc	ctggagcaag	2460
tgcagcagca	actgtggagg	gggcatgcag	tcgcggcgctc	gggcctgcga	gaacggcaac	2520
tcctgcctgg	gctgcggcgt	ggagttcaag	acgtgcaacc	ccgagggtg	ccccgaagtg	2580
cggcgcaaca	ccccctggac	gccgtggctg	cccgtgaacg	tgacgcaggg	cggggcacgg	2640
caggagcagc	ggttccgctt	cacctgccgc	gcgccccttg	cagacccgca	cggcctgcag	2700
ttcggcagga	gaaggaccga	gacgaggacc	tgtcccgcgg	acggctccgg	ctcctgcgac	2760
accgacgccc	tggtggaggt	cctcctgcgc	agcgggagca	cctccccgca	cacggtgagc	2820
gggggctggg	ccgcctgggg	cccgtggctg	tcctgctccc	gggactgcga	gctgggcttc	2880
cgcttccgca	agagaacgtg	cactaaccgc	gagccccgca	acgggggcct	gccctgcgtg	2940
ggcgtgctg	ccgagtacca	ggactgcaac	ccccaggctt	gccagttcgc	gggtgcttgg	3000
tcctgctgga	cctcatggtc	tccatgctca	gcttcctgtg	gtgggggtca	ctatcaacgc	3060
accggttctt	gcaccagccc	cgcaccctcc	ccagggtgagg	acatctgtct	cgggctgcac	3120
acggaggagg	cactatgtgc	cacacaggcc	tgcccagaag	gctggctgcc	ctggtctgag	3180
tggagtaagt	gcactgacga	cggagcccag	agccgaagcc	ggcactgtga	ggagctcctc	3240
ccagggtcca	gcgcmgtgca	tggaacacgc	agccagagcc	gccccctgcc	ctacagcgag	3300
attcscgtca	tcctgcagc	ctccagcatg	gaggaggcca	ccgactgtgc	agggttcaat	3360
ctcatccact	tgggtggccac	gggcatctcc	tgcttcttgg	gctctgggct	cctgacccta	3420
gcagtgtacc	tgtcttgcca	gcactgccag	cgctcagtc	aggagtccac	actggtccat	3480
cctgccaccc	ccaaccattt	gcactacaag	ggcggaggca	ccccgaagaa	tgaaaagtac	3540
acacccatgg	aattcaagac	cctgaacaag	aataacttga	tcctgatga	cagagccaac	3600
ttctacccat	tgcagcagac	caatgtgtac	acgactactt	actaccaag	ccccctgaac	3660
aaacacagct	tccggccccga	ggcctcacct	ggacaacggt	gcttccccaa	cagctgatac	3720
cgccgtcctg	gggacttggg	cttcttgcc	tcataaggca	cagagcagat	ggagatggga	3780
cagtggagcc	agtttggttt	tctccctctg	cactaggcca	agaacttgct	gccttgccctg	3840
tgggggggtcc	catccggctt	cagagagctc	tggctggcat	tgaccatggg	ggaaagggct	3900
ggtttcaggc	tgacatatgg	ccgcaggctc	agttcagccc	aggctctmtca	tggttatctt	3960
ccaacccact	gtcacgctga	cactatgctg	ccatgcctgg	gctgtggacc	tactgggcat	4020
ttgaggaayt	ggagaatgga	gatggcaaga	gggcaggctt	ttaagtttgg	gttgagaca	4080
acttcctgtg	gccccacaa	gctgagctg	gccttctcca	gctggcccca	aaaaaggcct	4140
ttgctacatc	ctgattatct	ctgaaagtaa	tcaatcaagt	ggctccagta	gctctggatt	4200
ttctgccagg	gctgggcat	tgtgggtgctg	ccccagtatg	acatgggacc	aaggccagcg	4260
caggttatcc	acctctgctt	ggaagtctat	actctaccca	gggcatccct	ctggtcagag	4320
gcagtgagta	ctgggaactg	gaggctgacc	tgtgcttaga	agtcctttaa	tctgggctgg	4380
tacaggcctc	agccttgccc	tcaatgcacg	aaagggtggc	caggagagag	gatcaatgcc	4440
ataggaggca	gaagtctggc	ctctgtgcct	ctatggagac	tatcttccag	ttgctgctca	4500
acagagttgt	tggtgagac	ctgcttggga	gtctctgctg	gcccttcac	tggtcaggaa	4560
cacacacaca	cacacactca	cacacgcaca	cacaatcaca	atttgctaca	gcaacaaaaa	4620
agacattggg	ctgtggcatt	attaattaaa	gatgatattcc	agtcacaaaa	aaact	4675

<210> 17

<211> 4731

<212> DNA

<213> Homo sapiens

<400> 17

attggagatg	ctcgggggca	ggctgccgcg	ttgtgtcctg	cttttctgcg	gccagaccaa	60
gccgtctgga	gctgctgggc	aggttttctt	gctgacctca	cctgaccaca	gtggcctggg	120
tggactctac	agggaaatgt	tgttttctcc	ctgggagcag	tagcagcagt	cctggctccc	180
ctggactgag	aactcctcat	cagccccagg	aagcccggac	cccctttcag	ggatctggaa	240

ccggtgtgcc	tgtggcccca	ggtctgtctc	caggcgtggg	ctgaagtcct	gactttctgtc	300
gctgggggca	aggagtggga	gagccagct	gctgcctggg	ctttggcaga	cagcaggctg	360
atggtgtctg	cttccccgag	actgcttctc	ctgcctgtct	tctgatttcc	ctgcatgggtg	420
cccgcagctg	agctgtctacg	ggtcttctcc	cctgtctgct	tcccggagct	aggactgcag	480
aggggcctat	catggtgtctt	gcaggccccc	tggctgtctc	gctgttgctg	cccagcctca	540
cactgtgtgt	gtcccacctc	tccagctccc	aggatgtctc	cagtgaagccc	agcagtgagc	600
agcagctgtg	cgcccttagc	aagcacccca	ccgtggcctt	tgaagacctg	cagccgtggg	660
tctctaactt	cacctaccct	ggagcccggg	atttctccca	gctggctttg	gacccctccg	720
ggaaccagct	catcgtggga	gccaggaact	acctcttcag	actcagcctt	gccaatgtct	780
ctcttcttca	ggccacagag	tgggcctcca	gtgaggacac	gcgccgtctc	tgccaaagca	840
aagggaagac	tgaggaggag	tgtcagaact	acgtgcgagt	cctgatcgct	gccggccgga	900
aggtgttcat	gtgtggaacc	aatgcctttt	ccccatgtg	caccagcaga	caggtgggga	960
acctcagccg	gactactgag	aagatcaatg	gtgtggcccg	ctgcccctat	gaccacgccc	1020
acaactccac	agctgtcatc	tcctcccagg	gggagctcta	tgcagccacg	gtcatcgact	1080
tctcaggtcg	ggaccctgcc	atctaccgca	gcctgggag	tgggccaccg	cttcgcactg	1140
cccaatataa	ctccaagtgg	cttaatgagc	caaacttcgt	ggcagcctat	gatattgggc	1200
tgtttgcata	cttcttccctg	cgggagaacg	cagtggagca	cgactgtgga	cgaccgtgtg	1260
actctcgcgt	ggcccgctg	tgcaagaatg	acgtgggggg	ccgattcctg	ctggaggaca	1320
catggaccac	attcatgaag	gcccggctca	actgctcccg	cccgggagag	gtccccttct	1380
actataacga	gctgcagagt	gccttccact	tgccagagca	ggacctcatc	tatggagtgt	1440
tcacaaccaa	cgtaaacagc	atcgcggtt	ctgctgtctg	cgcttcaac	ctcagtgtca	1500
tctcccagge	tttcaatggc	ccatttcgct	accaggagaa	ccccagggct	gcctggctcc	1560
ccatagccaa	ccccatcccc	aatttccagt	gtggcaccct	gcctgagacc	ggtcccaacg	1620
agaacctgac	ggagcgcagc	ctgcaggacg	cgacgcgctt	cttctctgatg	agcgaggccg	1680
tgcagccggt	gacaccgag	ccctgtgtca	cccaggacag	cgtgcgcttc	tcacacctcg	1740
tggtggacct	ggtgcaggct	aaagacacgc	cttaccatgt	actctacatt	ggcaccgagt	1800
cgggcaccat	cctgaagcgc	ctgtccacgg	cgagccgcag	cctccacggc	tgctacctgg	1860
aggagctgca	cgtgctgccc	cccgggcgcc	gcgagccctt	gcgcagcctg	cgcatcctgc	1920
acagcgcccc	cgcgctcttc	gtggggctga	gagacggcgt	cctgcgggtc	ccactggaga	1980
ggtgcgcgc	ctaccgcagc	cagggggcat	gcctgggggc	ccgggacccg	tactgtggct	2040
gggacgggaa	gcagcaacgt	tgcagcacac	tcgaggacag	ctccaacatg	agcctctgga	2100
cccagaacat	caccgcctgt	cctgtgcgga	atgtgacacg	ggatgggggc	ttcggcccat	2160
ggtcaccatg	gcaaccatgt	gagcacttgg	atggggacaa	ctcaggctct	tgctgtgtc	2220
gagctcgatc	ctgtgattcc	cctcgacccc	gctgtggggg	ccttgactgc	ctggggccag	2280
ccatccacat	cgccaactgc	tccaggaatg	gggcgtggac	cccggtgga	tcgtgggcgc	2340
tgtgcagcac	gtcctgtggc	atcggttcc	aggtccgcca	gcgaagttgc	agcaaccctg	2400
ctccccgcca	cgggggcccgc	atctgcgtgg	gcaagagccg	ggaggaaacg	ttctgtaatg	2460
agaacacgcc	ttgcccgggtg	cccattcttct	gggttctctg	gggtcctctg	agcaagtgc	2520
gcagcaactg	tggagggggc	atgcagtcgc	ggcgtcgggc	ctgcgagaa	ggcaactcct	2580
gcctgggctg	cggcgtggag	ttcaagacgt	gcaaccccg	gggctgcccc	gaagtgcggc	2640
gcaacacccc	ctggacgccc	tggctgcccg	tgaacgtgac	gcagggcggg	gcacggcagg	2700
agcagcggtt	ccgcttcacc	tgccgcgcgc	cccttgacga	cccgcacggc	ctgcagttcg	2760
gcaggagaag	gaccgagacg	aggacctgtc	ccgcggacgg	ctccggctcc	tgcgacccg	2820
acgcctcagt	ggaggtcctc	ctgcgcagcg	ggagcacctc	cccgcacacg	gtgagcggg	2880
gctggggcgc	ctggggccccg	tggctgtcct	gctcccggga	ctgcgagctg	ggcttccgcg	2940
tccgcaagag	aacgtgcact	aacccggagc	cccgcacggg	gggcctgccc	tgctgtggcg	3000
atgctgccga	gtaccaggac	tgcaaccccc	aggcttgccc	agttcggggg	gcttggtcct	3060
gctggacctc	atggtctcca	tgctcagctt	cctgtgtgtg	gggtcactat	caacgcaccc	3120
gttctgtcac	cagccccgca	ccctccccag	gtgaggacat	ctgtctcggg	ctgcacacgg	3180
aggaggcact	atgtgccaca	caggcctgcc	cagaaggctg	gtcgccctgg	tctgagtgg	3240
gtaagtgcac	tgacgacgga	gcccagagcc	gaagccggca	ctgtgaggag	ctcctcccag	3300
gggtccagcg	mtgtgtgga	aacagcagcc	agagccggcc	ctgcccctac	agcgagattc	3360
scgtccacct	gacatggctcc	agcatggagg	aggccaccca	ctgtgcaggg	ttcaatctca	3420
tccacttgggt	ggccacgggc	atctcctgct	tcttgggctc	tgggctcctg	accctagcag	3480
tgtacctgtc	ttgccagcac	tgccagcgct	agtcccagga	gtccacactg	gtccatcctg	3540
ccacccccaa	ccatttgcac	tacaagggcg	gaggcacccc	gaagaatgaa	aagtacacac	3600
ccatggaatt	caagaccctg	aacaagaata	acttgatccc	tgatgacaga	gccaacttct	3660
acccattgca	gcagaccaat	gtgtacacga	ctacttacta	cccaagcccc	ctgaacaaac	3720
acagcttccg	gcccagggcc	tcacctggac	aacggtgctt	ccccaacagc	tgataccgcc	3780
gtcctgggga	cttgggcttc	ttgccttcat	aaggcacaga	gcagatggag	atgggacagt	3840
ggagccagtt	tgggtttctc	cctctgcact	aggccaagaa	cttgctgcct	tgccgtgtggg	3900

gggtcccac	cggcttcaga	gagctctggc	tggcattgac	catgggggaa	agggctgggt	3960
tcaggctgac	atatggccgc	aggtccagtt	cagcccaggt	ctmtcatggt	tatcttccaa	4020
cccactgtca	cgctgacact	atgctgcca	gcctgggctg	tggacctact	gggcatttga	4080
ggaaytgag	aatggagatg	gcaagagggc	aggcttttaa	gtttgggttg	gagacaactt	4140
cctgtggccc	ccacaagctg	agtctggcct	tctccagctg	gccccaaaaa	aggcctttgc	4200
tacatcctga	ttatctctga	aagtaataca	tcaagtggct	ccagtagctc	tggattttct	4260
gccagggctg	ggccattgtg	gtgctgcccc	agtatgacat	gggaccaagg	ccagcgcagg	4320
ttatccacct	ctgcctggaa	gtctatactc	taccagggc	atccctctgg	tcagaggcag	4380
tgagtactgg	gaactggagg	ctgacctgtg	cttagaagtc	ctttaatctg	ggctggtaca	4440
ggcctcagcc	ttgccctcaa	tgcacgaaaag	gtggcccagg	agagaggatc	aatgccatag	4500
gaggcagaag	tctggcctct	gtgcctctat	ggagactatc	ttccagttgc	tgctcaacag	4560
agttgttggc	tgagacctgc	ttgggagttc	ctgctggccc	ttcatctgtt	caggaacaca	4620
cacacacaca	cactcacaca	cgcacacaca	atcacaattt	gctacagcaa	caaaaaagac	4680
attgggctgt	ggcattatta	attaaagatg	atatccagtc	aaaaaaaaac	t	4731

<210> 18
 <211> 4703
 <212> DNA
 <213> Homo sapiens

<400> 18

gcggccgccc	cattcccaga	ccggccgcca	gcccattctg	ttagctccc	ccgctccgcg	60
ccgcccggga	gtcgggagcc	gcggggaacc	gggcacctgc	acccgectct	gggagccagc	120
ttgggtccgg	gttgcaactg	gccctgccag	ggctgtggtc	ggcgcatctg	ggctgcagcg	180
gcgatgggga	cccgggaccc	aggcctggag	aaggagacgg	acgagtgagg	ctgagggagc	240
gagggacaga	gtgagtgggt	ccagctgggt	cctggcctgt	gtctcttggg	tgccctgtgg	300
cttcagtcgg	tctcctgttg	cccaccacct	cgctccctgg	ccgcctgata	ccccagccca	360
acagctaagg	tgtggatgga	cagtaggggg	ctggcttctc	tcaactggta	ggggtcttct	420
cccctgtctg	cctcccggag	ctaggactgc	agaggggctt	atcatgggtg	ttgcaggccc	480
cctggctgtc	tcgctgttgc	tgcccagcct	cacactgctg	gtgtcccacc	tctccagctc	540
ccaggatgtc	tccagtga	ccagcagtg	gcagcagctg	tgcgccccta	gcaagcacc	600
caccgtggcc	tttgaagacc	tgcagccgtg	ggctcttaac	ttcacctacc	ctggagcccc	660
ggatttctcc	cagctggctt	tggacccttc	cgggaaccag	ctcatcgtgg	gagccaggaa	720
ctacctcttc	agactcagcc	ttgccaatgt	ctctcttctt	caggccacag	agtgggcctc	780
cagtggagg	acgcgcgct	cctgccaaag	caaagggaag	actgaggagg	agtgtcagaa	840
ctacgtgcga	gtcctgatcg	tcgcccggcg	gaagggtgtt	atgtgtggaa	ccaatgcctt	900
ttcccccatg	tgcaccagca	gacaggtggg	gaacctcagc	cggactactg	agaagatcaa	960
tgggtgtggc	cgctgcccct	atgaccacag	ccacaactcc	acagctgtca	tctcctccca	1020
gggggagctc	tatgcagcca	cggtcacga	cttctcaggt	cgggaccctg	ccatctaccg	1080
cagcctgggc	agtgggccac	cgcttcgcac	tgcccaatat	aactccaagt	ggcttaatga	1140
gccaaacttc	gtggcagcct	atgatattgg	gctgtttgca	tacttcttcc	tgccgggagaa	1200
cgcagtggag	cacgactgtg	gacgcaccgt	gtactctcgc	gtggcccgcg	tgtgcaagaa	1260
tgacgtgggg	ggccgattcc	tgctggagga	cacatggacc	acattcatga	aggcccggtc	1320
caactgctcc	cgcccgggcg	aggctccctt	ctactataac	gagctgcaga	gtgccttcca	1380
cttgccagag	caggacctca	tctatggagt	tttcacaacc	aacgtaaaca	gcctgcgggc	1440
ttctgctgtc	tgcgccttca	acctcagtcg	tatctcccag	gctttcaatg	gcccatttcg	1500
ctaccaggag	aaccccaggg	ctgcctggct	ccccatagcc	aaccccattc	ccaatttcca	1560
gtgtggcacc	ctgcctgaga	ccggtcccaa	cgagaacctg	acggagcgca	gcctgcagga	1620
cgcgcagcgc	ctcttcctga	tgagcgaggc	cgtgcagccg	gtgacaccgc	agccctgtgt	1680
cacccaggac	agcgtgcgct	tctcacacct	cgtggtggac	ctggtgcagg	ctaaagacac	1740
gctctaccat	gtactctaca	ttggcaccga	gtcgggcacc	atcctgaagg	cgctgtccac	1800
ggcgagccgc	agctccacg	gctgctacct	ggagagctg	cacgtgctgc	ccccgggcg	1860
ccgcgagccc	ctgcgcagcc	tgcgcatcct	gcacagcgcc	cgcgcgctct	tcgtggggct	1920
gagagacggc	gtcctgcggg	tcccactgga	gaggtgcgcc	gcctaccgca	gccagggggc	1980
atgcctgggg	gcccgggacc	cgtactgtgg	ctgggacggg	aagcagcaac	gttgacgac	2040
actcaggag	agctccaaca	tgagcctctg	gaccagaac	atcaccgcct	gtcctgtgcg	2100
gaatgtgaca	cgggatgggg	gcttcggccc	atggtcacca	tggcaaccat	gtgagcactt	2160
ggatggggac	aactcaggct	cttgctgtg	tcgagctcga	tcctgtgatt	cccctcgacc	2220
ccgctgtggg	ggccttgact	gcctggggcc	agccatccac	atcgccaact	gctccaggaa	2280
tggggcgtgg	accccggtgt	catcgtgggc	gctgtgcagc	acgtcctgtg	gcctcggctt	2340

ccagggtccgc	cagcgaagtt	gcagcaaccc	tgctccccgc	cacggggggcc	gcattctgcgt	2400
gggcaagagc	cgggaggaac	ggttctgtaa	tgagaacacg	ccttgcccgg	tgcccatctt	2460
ctgggcttcc	tggggctcct	ggagcaagt	cagcagcaac	tgtggagggg	gcattgcagtc	2520
gcggcgctcg	gcctgcgaga	acggcaactc	ctgcctgggc	tgccggctgg	agttcaagac	2580
gtgcaacccc	gagggctgcc	ccgaagtgcg	gcgcaacacc	ccctggacgc	cgtggctgcc	2640
cgtgaacgtg	acgcagggcg	gggcacggca	ggagcagcgg	ttccgcttca	cctgccgcgc	2700
gccccttgca	gacccgcacg	gcctgcagtt	cggcaggaga	aggaccgaga	cgaggacctg	2760
tcccgcggac	ggctccggct	cctgcgacac	cgacgccttg	gtggaggtcc	tcctgcgcag	2820
cgggagcacc	tccccgcaca	cggtagcgcg	gggtggggcc	gcctggggcc	cgtggctcgtc	2880
ctgctccccg	gactgcgagc	tgggcttccg	cgtccgcaag	agaacgtgca	ctaaccggga	2940
gccccgcaac	gggggcctgc	cctgcgtggg	cgatgctgcc	gagtaccagg	actgcaaccc	3000
ccaggcttgc	ccagttcggg	gtgcttggtc	ctgctggacc	tcattggtctc	catgctcagc	3060
ttcctgtggt	gggggtcact	atcaacgcac	ccgttcctgc	accagccccg	caccctcccc	3120
aggtgaggac	atctgtctcg	ggctgcacac	ggaggaggca	ctatgtgcca	cacaggcctg	3180
cccagaaggc	tggtcgccct	ggtctgagtg	gagtaagtgc	actgacgacg	gagcccagag	3240
ccgaagccgg	cactgtgagg	agctcctccc	agggctccagc	gcmtgtgctg	gaaacagcag	3300
ccagagccgc	ccctgccccct	acagcgagat	tcscgtcatc	ctgccagcct	ccagcatgga	3360
ggaggccacc	gactgtgcag	ggttcaatct	catccacttg	gtggccacgg	gcattcctctg	3420
cttcttgggc	tctgggctcc	tgaccctagc	agtgtacctg	tcttgccagc	actgccagcg	3480
tcagtccag	gagtcacac	tggtccatcc	tgccaccccc	aaccatttgc	actacaaggg	3540
cggaggcacc	ccgaagaatg	aaaagtacac	acccatggaa	ttcaagacc	tgaacaagaa	3600
taacttgatc	cctgatgaca	gagccaactt	ctaccattg	cagcagacca	atgtgtacac	3660
gactacttac	tacccaagcc	ccctgaacaa	acacagcttc	cggcccggag	cctcacctgg	3720
acaacggtgc	ttcccccaaca	gctgataccg	ccgtcctggg	gacttgggct	tcttgcccttc	3780
ataaggcaca	gagcagatgg	agatgggaca	gtggagccag	tttggttttc	tcctctcgca	3840
ctaggccaag	aacttgctgc	cctgcctgtg	gggggtccca	tccggcttca	gagagctctg	3900
gctggcattg	accatggggg	aaagggtctg	tttcaggctg	acatatggcc	gcaggctccag	3960
ttcagcccg	gtctmtcatg	gttatcttcc	aaccactgt	cacgctgaca	ctatgctgcc	4020
atgcctgggc	tgtggacctt	ctgggcattt	gaggaaytgg	agaatggaga	tggcaagagg	4080
gcaggctttt	aagtttggtg	tggagacaac	ttcctgtggc	ccccacaagc	tgagtctggc	4140
cttctccagc	tggccccaaa	aaaggccttt	gctacatcct	gattatctct	gaaagtaatc	4200
aatcaagtgg	ctccagtagc	tctggatttt	ctgccagggc	tgggccattg	tggtgctgcc	4260
ccagtatgac	atgggaccaa	ggccagcgca	ggttatccac	ctctgcctgg	aagtctatac	4320
tctacccag	gcattccctct	ggtcagaggc	agtgagtact	gggaactgga	ggctgacctg	4380
tgtctagaag	tcctttaatc	tgggctggta	caggcctcag	ccttgccctc	aatgcacgaa	4440
agggtggcca	ggagagagga	tcaatgccat	aggaggcaga	agtctggcct	ctgtgcctct	4500
atggagacta	tcttcagtt	gctgctcaac	agagttgttg	gctgagacct	gcttgggagt	4560
ctctgctggc	ccttcactctg	ttcaggaaca	cacacacaca	cacactcaca	cacgcacaca	4620
caatcacaat	ttgctacagc	aacaaaaaag	acattgggct	gtggcattat	taattaaaga	4680
tgatatccag	tcaaaaaaaa	act				4703

<210> 19
 <211> 4405
 <212> DNA
 <213> Homo sapiens

<400> 19						
gcggccgccc	cattcccaga	ccggccgcca	gcccattctg	ttagctcccg	ccgctccgcg	60
ccgcccggga	gtcgggagcc	gcggggaacc	gggcacctgc	acccgcctct	gggaggtctt	120
ctcccctgtc	tgcttcccgg	agctaggact	gcagaggggc	ctatcatggt	gcttgcaggc	180
cccctggctg	tctcgtgtgt	gctgcccagc	ctcacactgc	tgggtgtcca	cctctccagc	240
tcccaggatg	tctccagtga	gcccagcagt	gagcagcagc	tgtgcgccct	tagcaagcac	300
cccaccgtgg	cctttgaaga	cctgcagccg	tgggtctcta	acttcacctt	ccctggagcc	360
cgggattttc	cccagctggc	tttggacccc	tccgggaacc	agctcatcgt	gggagccagg	420
aactacctct	tcagactcag	ccttgccaat	gtctctcttc	ttcaggccac	agagtgggac	480
tccagtggag	acacgcgccg	ctcctgcca	agcaaaggga	agactgagga	ggagtgtcag	540
aactacgtgc	gagtcctgat	cgtcgccggc	cgggaaggtg	tcatgtgtgg	aaccaatgcc	600
ttttcccca	tgtgcaccag	cagacagggt	gggaacctca	gccggactac	tgagaagatc	660
aatggtgtgg	cccgtgccc	ctatgacca	cgccacaact	ccacagctgt	catctcctcc	720
cagggggagc	tctatgcagc	cacggctcatc	gacttctcag	gtcgggaccc	tgccatctac	780

cgcagcctgg	gcagtgggccc	accgcttcgc	actgcccaat	ataactccaa	gtggcttaat	840
gagccaaact	tcgtggcagc	ctatgatatt	gggctgtttg	catacttctt	cctgcgggag	900
aacgcagtgg	agcacgactg	tggacgcacc	gtgtactctc	gcgtggcccc	cgtgtgcaag	960
aatgacgtgg	ggggccgatt	cctgctggag	gacacatgga	ccacattcat	gaaggcccg	1020
ctcaactgct	cccggccggg	cgagggtccc	ttctactata	acgagctgca	gagtgccttc	1080
cacttgccag	agcaggacct	catctatgga	gttttcacaa	ccaacgtaaa	cagcatcgcg	1140
gcttctgctg	tctgcgcctt	caacctcagt	gctatctccc	aggctttcaa	tggcccattt	1200
cgctaccagg	agaaccccag	ggctgcctgg	ctccccatag	ccaaccccat	ccccaatttc	1260
cagtgtggca	ccctgcctga	gaccgggtcc	aacgagaacc	tgacggagcg	cagcctgcag	1320
gacgcgcagc	gcctcttcct	gatgagcgag	gccgtgcagc	cggtgacacc	cgagccctgt	1380
gtcaccaggg	acagcgtgcg	cttctcacac	ctcgtgggtg	acctgggtgca	ggctaaagac	1440
acgtctctacc	atgtactcta	cattggcacc	gagtgcggga	ccatcctgaa	ggcgtgtcc	1500
acggcgagcc	gcagcctcca	cggctgctac	ctggaggagc	tgcacgtgct	gccccccggg	1560
cgccgcgagc	ccctgcgcag	cctgcgcac	ctgcacagcg	cccgcgcgct	cttcgtgggg	1620
ctgagagacg	gcgtcctgcg	gggtccactg	gagagggtcg	ccgcctaccg	cagccagggg	1680
gcatgcctgg	gggccccgga	cccgtactgt	ggctgggagc	ggaagcagca	acgttgacgc	1740
acactcgagg	acagctccaa	catgagcctc	tggaccaga	acatcaccgc	ctgtcctgtg	1800
cggaatgtga	cacgggatgg	gggcttcggc	ccatggtcac	catggcaacc	atgtgagcac	1860
ttggatgggg	acaactcagg	ctcttgccctg	tgtcgagctc	gatcctgtga	ttccccctga	1920
ccccgctgtg	ggggccttga	ctgcctgggg	ccagccatcc	acatcgccaa	ctgtctcagg	1980
aatggggcgt	ggaccccgtg	gtcatcgtgg	gcgtgtgca	gcacgtcctg	tggcatcggc	2040
ttccaggtcc	gccagcgaag	ttgcagcaac	cctgctcccc	gccacggggg	ccgcatctgc	2100
gtgggcaaga	gccgggagga	acggttctgt	aatgagaaca	cgccttgccc	ggtgcccac	2160
ttctgggctt	cctggggctc	ctggagcaag	tgcagcagca	actgtggagg	gggcatgcag	2220
tcgcggcgct	gggcctgcga	gaacggcaac	tcctgcctgg	gctgcggcgt	ggagttcaag	2280
acgtgcaacc	ccgagggctg	ccccgaagt	cggcgcaaca	ccccctggac	gccgtggctg	2340
cccgtagaac	tgaccagagg	cggggcacgg	caggagcagc	ggttccgctt	cacctggcgc	2400
gcgccccctg	gcagaccgca	cggcctgcag	ttcggcagga	gaaggaccga	gacgagacc	2460
tgtcccgcg	acggctccgg	ctcctgcgac	accgacgccc	tgggtggagg	cctcctgcgc	2520
agcgggagca	cctccccgca	cacgggtgagc	gggggctggg	ccgcctgggg	cccgtggctg	2580
tcctgctccc	gggactgcga	gctgggcttc	cgcgtccgca	agagaacgtg	cactaaccgc	2640
gagccccgca	acgggggcct	gccctgcgtg	ggcgatgctg	ccgagtacca	ggactgcaac	2700
ccccaggctt	gcccagttcg	gggtgcttgg	tcctgctgga	cctcatggtc	tccatgctca	2760
gcttcctgtg	gtgggggtca	ctatcaacgc	acccgttcc	gcaccagccc	cgcaccctcc	2820
ccagtgagg	acatctgtct	cgggtgcac	actggaggag	cactatgtgc	cacacaggcc	2880
tgcccagaag	gctggtcgcc	ctggctgag	tggagtaagt	gcactgacga	cggagcccag	2940
agccgaagcc	ggcactgtga	ggagctcctc	ccagggtcca	gcgcmgtgtg	tggaaacagc	3000
agccagagcc	gcccctgccc	ctacagcgag	attcscgtca	tcctgccagc	ctccagcatg	3060
gaggaggcca	ccgactgtgc	agggttcaat	ctcatccact	tgggtggccac	gggcatctcc	3120
tgtctcttgg	gctctgggct	cctgacccta	gcagtgtacc	tgtcttgcca	gcaactgccag	3180
cgtcagtccc	aggagtccac	actgggtccat	cctgccaccc	ccaaccattt	gcactacaag	3240
ggcggaggca	ccccgaagaa	tgaaaagtac	acacccatgg	aattcaagac	cctgaacaag	3300
aataacttga	tccctgtatga	cagagccaac	ttctacccat	tgcagcagac	caatgtgtac	3360
acgactactt	actaccaag	ccccctgaac	aaacacagct	tccggcccga	ggcctcacct	3420
ggacaacggg	gcttccccaa	cagctgatac	cgcgcgtcctg	gggacttggg	cttcttgctt	3480
tcataaggca	cagagcagat	ggagatggga	cagtggagcc	agtttgggtt	tctccctctg	3540
cactaggcca	agaacttgct	gccttgcttg	tggggggtcc	catccggctt	cagagagctc	3600
tggctggcat	tgaccatggg	ggaaagggct	ggtttcaggc	tgacatatgg	ccgcaggtcc	3660
agttcagccc	aggtctmtca	tgggttatctt	ccaacccact	gtcacgctga	cactatgctg	3720
ccatgcctgg	gctgtggacc	tactgggcat	ttgagggaayt	ggagaatgga	gatggcaaga	3780
gggcaggctt	ttaagtttgg	gttgagagca	acttcctgtg	gccccacaa	gctgagctctg	3840
gcttctcca	gctggcccca	aaaaaggcct	ttgtcacatc	ctgattatct	ctgaaagtaa	3900
tcaatcaagt	ggctccagta	gctctggatt	ttctgccagg	gctggggccat	tgtgggtgctg	3960
ccccagtatg	acatgggacc	aaggccagcg	cagggttatcc	acctctgcct	ggaagtctat	4020
actctaccca	gggcatccct	ctggtcagag	gcagtgaagta	ctgggaactg	gaggctgacc	4080
tgtgcttaga	agtcctttaa	tctgggctgg	tacaggcctc	agccttgccc	tcaatgcacg	4140
aaaggtggcc	caggagagag	gatcaatgcc	ataggaggca	gaagtctggc	ctctgtgcct	4200
ctatggagac	tatcttccag	ttgctgctca	acagagttgt	tggctgagac	ctgcttggga	4260
gtctctgctg	gcccttcctc	tgttcaggaa	cacacacaca	cacacactca	cacacgcaca	4320
cacaatcaca	atttgctaca	gcaacaaaaa	agacattggg	ctgtggcatt	attaattaaa	4380
gatgatatcc	agtcacaaaa	aaact				4405

<210> 20
 <211> 3938
 <212> DNA
 <213> Homo sapiens

<400> 20
 gcggccgccc cattcccaga ccggccgcca gcccatctgg ttagctcccg ccgctccgcg 60
 ccgcccggga gtcgggagcc gcggggaacc gggcacctgc acccgctctt gggagtgagt 120
 ggttccagct ggtgcctggc ctgtgtctct tggatgccct gtggcttcag tccgtctcct 180
 gttgccacc accctgctcc tgggcccgtt gataccccag cccaacagct aaggtgtgga 240
 tggacagtag ggggctggct tctctcactg gtcagggggtc ttctcccctg tctgcctccc 300
 ggagctagga ctgcagaggg gcctatcatg gtgcttgag gccccctggc tgtctcgctg 360
 ttgctgcccc gcctcacact gctggtgtcc cacctctcca gctcccagga tgtctccagt 420
 gagcccagca gtgagcagca gctgtgcgcc cttagcaagc accccaccgt ggcctttgaa 480
 gacctgcagc cgtgggtctc taacttcacc taccctggag cccgggattt ctccagctg 540
 gcttttgacc cctccgggaa ccagctcatc gtgggagcca ggaactacct cttcagactc 600
 agccttgcca atgtctctct tcttcaggcc acagagtggg cctccagtga ggacacgcgc 660
 cgctcctgcc aaagcaaagg gaagactgag gaggagtgtc agaactacgt gcgagtctg 720
 atcgctcgcc gccggaaggt gttcatgtgt ggaaccaatg ccttttcccc catgtgcacc 780
 agcagacagg tggggaacct cagccggact actgagaaga tcaatgggtg ggcccgtgc 840
 ccctatgacc caccgccaaa ctccacagct gtcatctcct cccaggggga gctctatgca 900
 gccacggtca tcgacttctc aggtcgggac cctgccatct accgcagcct gggcagtggg 960
 ccaccgcttc gcactgcccc atataactcc aagtggctta atgagccaaa cttcgtggca 1020
 gcctatgata ttgggctggt tgcatacttc ttctgcggg agaacgcagt ggagcacgac 1080
 tgtggacgca ccgtgtactc tcgctgggcc cgctgtgca agaatacagt ggggggcca 1140
 ttctctgctg aggacacatg gaccacattc atgaaggccc ggctcaactg ctcccggccg 1200
 ggcgaggtcc ccttctacta taacgagctg cagagtgcct tccacttgcc agagcaggac 1260
 ctcatctatg gaggttttcac aaccaacgta aacagcatcg cggtttctgc tgtctgcgcc 1320
 ttcaacctca gtgctatctc ccaggctttc aatggcccat ttcgctacca ggagaacccc 1380
 agggctgcct ggctcccat agccaacccc atccccaatt tccagtgtgg caccctgcct 1440
 gagaccggtc ccaacgagaa cctgacggag cgcagcctgc aggacgcgca gcgcctcttc 1500
 ctgatgagcg aggcctgca gccggtgaca cccgagccct gtgtcaccga ggacagcgtg 1560
 cgcttctcac acctcgtggt ggacctgtg caggctaaag acacgctcta ccatgtactc 1620
 tacattggca ccgagtggg caccatcctg aaggcgtgt ccacggcgag ccgcccctc 1680
 caccgctgct acctggagga gctgcacgtg ctgcccccg ggccgcgca gccctgcgc 1740
 agcctgcgca tcctgcacag cgcgcgcg ctcttcgtgg ggctgagaga cggcgtcctg 1800
 cgggtcccac tggagaggtg cgccgcctac cgcagccagg gggcatgcct gggggcccgg 1860
 gaccgctact gtggctggga cgggaagcag caacgttgca gcacactcga ggacagctcc 1920
 aacatgagcc tctggaccca gaacatcacc gcctgtcctg tgcggaatgt gacacgggat 1980
 gggggcttcg gcccatggtc accatggcaa ccatgtgagc acttgatgg ggacaactca 2040
 ggctcttgcc tgtgtcgagc tcgatcctgt aattccccct gaccccgctg tgggggcctt 2100
 gactgcctgg ggccagccat ccacatcgcc aactgtcca ggaatggggc gtggacccc 2160
 tggctcctgt ggccgtgtg cagcacgtcc tgtggcatcg gcttccaggt ccgcccagca 2220
 agttgcagca accctgctcc ccgccacggg ggccgcctct gcgtgggcaa gagccgggag 2280
 gaacggttct gtaatgagaa cacgccttgc ccggtgcccc tcttctgggc ttcctggggc 2340
 tcctggagca agtgcagcag caactgtgga gggggcatgc agtcgcggcg tcgggcctgc 2400
 gagaacggca actcctgcct gggctgcggc gtggagttca agacgtgcaa ccccagggc 2460
 tgccccgaag tgcggcgcaa caccctctgg acgcctggc tgccttgaa cgtgacgcag 2520
 ggcggggcac ggcaggagca gcggttccgc ttcacctgcc gcgcgcccct tgcagaccgc 2580
 cacggcctgc agttcggcag gagaaggacc gagacagga cctgtcccgc ggacggctcc 2640
 ggctcctgcg acaccgacgc cctgggtggag gtcctcctgc gcagcgggag cactccccg 2700
 cacacggtga gcgggggctg ggccgcctgg ggcccggtgt cgtcctgctc ccgggactgc 2760
 gagctgggct tcgcgctccg caagagaacg tgcactaacc cggagccccg caacgggggc 2820
 ctgccctgcg tgggcgatgc tgccgagtac caggactgca acccccaggc ttgccagtt 2880
 cgggggtgctt ggtcctgctg gacctcatgg tctccatgct cagcttcctg tgggtggggg 2940
 cactatcaac gcaccgcttc ctgcaccagc cccgcaccct ccccaggtga ggacatctgt 3000
 ctccgggctgc acacggagga ggcactatgt gccacacagg cctgccagga aggctggctg 3060
 cctgggtctg agtggagtaa gtgcactgac gacggagccc agagccgaag ccggcactgt 3120
 gaggagctcc tcccagggtc cagcgcmtgt gctggaaaca gcagccagag ccgcccctgc 3180


```

ccctacagcg agattcscgt catcctgccg gcctccagca tggaggaggc caccgactgt 3240
gcagggttca atctcatcca cttggtggcc acgggcatct cctgcttctt gggctctggg 3300
ctcctgaccc tagcagtgt cctgtcttgc cagcactgcc agcgtcagtc ccaggagtcc 3360
acactgggtcc atcctgccac cccaaccat ttgcactaca agggcggagg caccgccgaag 3420
aatgaaaagt acacacccat ggaattcaag accctgaaca agaataactt gatccctgat 3480
gacagagcca acttctaccc attgcagcag accaatgccg gcgcagggtta tccacctctg 3540
cctggaagtc tatactctac ccagggtcatc cctctggtca gaggcagtga gtactgggaa 3600
ctggaggctg acctgtgctt agaagtcctt taatctgggc tggtagaggc ctcagccttg 3660
ccctcaatgc acgaaagggt gccagggaga gaggatcaat gccataggag gcagaagtct 3720
ggcctctgtg cctctatgga gactatcttc cagttgctgc tcaacagagt tgttggctga 3780
gacctgcttg ggagtctctg ctggcccttc atctgttcag gaacacacac acacacacac 3840
tcacacacgc acacacaatc acaatttgct acagcaacaa aaaagacatt gggctgtggc 3900
attattaatt aaagatgata tccagtcaaa aaaaaact 3938

```

<210> 21
 <211> 1095
 <212> PRT
 <213> Homo sapiens

<400> 21
 Met Val Leu Ala Gly Pro Leu Ala Val Ser Leu Leu Leu Pro Ser Leu
 1 5 10 15
 Thr Leu Leu Val Ser His Leu Ser Ser Ser Gln Asp Val Ser Ser Glu
 20 25 30
 Pro Ser Ser Glu Gln Gln Leu Cys Ala Leu Ser Lys His Pro Thr Val
 35 40 45
 Ala Phe Glu Asp Leu Gln Pro Trp Val Ser Asn Phe Thr Tyr Pro Gly
 50 55 60
 Ala Arg Asp Phe Ser Gln Leu Ala Leu Asp Pro Ser Gly Asn Gln Leu
 65 70 75 80
 Ile Val Gly Ala Arg Asn Tyr Leu Phe Arg Leu Ser Leu Ala Asn Val
 85 90 95
 Ser Leu Leu Gln Ala Thr Glu Trp Ala Ser Ser Glu Asp Thr Arg Arg
 100 105 110
 Ser Cys Gln Ser Lys Gly Lys Thr Glu Glu Glu Cys Gln Asn Tyr Val
 115 120 125
 Arg Val Leu Ile Val Ala Gly Arg Lys Val Phe Met Cys Gly Thr Asn
 130 135 140
 Ala Phe Ser Pro Met Cys Thr Ser Arg Gln Val Gly Asn Leu Ser Arg
 145 150 155 160
 Thr Thr Glu Lys Ile Asn Gly Val Ala Arg Cys Pro Tyr Asp Pro Arg
 165 170 175
 His Asn Ser Thr Ala Val Ile Ser Ser Gln Gly Glu Leu Tyr Ala Ala
 180 185 190
 Thr Val Ile Asp Phe Ser Gly Arg Asp Pro Ala Ile Tyr Arg Ser Leu
 195 200 205
 Gly Ser Gly Pro Pro Leu Arg Thr Ala Gln Tyr Asn Ser Lys Trp Leu

210	215	220
Asn Glu Pro Asn Phe Val Ala Ala Tyr Asp Ile Gly Leu Phe Ala Tyr 225 230 235 240		
Phe Phe Leu Arg Glu Asn Ala Val Glu His Asp Cys Gly Arg Thr Val 245 250 255		
Tyr Ser Arg Val Ala Arg Val Cys Lys Asn Asp Val Gly Gly Arg Phe 260 265 270		
Leu Leu Glu Asp Thr Trp Thr Thr Phe Met Lys Ala Arg Leu Asn Cys 275 280 285		
Ser Arg Pro Gly Glu Val Pro Phe Tyr Tyr Asn Glu Leu Gln Ser Ala 290 295 300		
Phe His Leu Pro Glu Gln Asp Leu Ile Tyr Gly Val Phe Thr Thr Asn 305 310 315 320		
Val Asn Ser Ile Ala Ala Ser Ala Val Cys Ala Phe Asn Leu Ser Ala 325 330 335		
Ile Ser Gln Ala Phe Asn Gly Pro Phe Arg Tyr Gln Glu Asn Pro Arg 340 345 350		
Ala Ala Trp Leu Pro Ile Ala Asn Pro Ile Pro Asn Phe Gln Cys Gly 355 360 365		
Thr Leu Pro Glu Thr Gly Pro Asn Glu Asn Leu Thr Glu Arg Ser Leu 370 375 380		
Gln Asp Ala Gln Arg Leu Phe Leu Met Ser Glu Ala Val Gln Pro Val 385 390 395 400		
Thr Pro Glu Pro Cys Val Thr Gln Asp Ser Val Arg Phe Ser His Leu 405 410 415		
Val Val Asp Leu Val Gln Ala Lys Asp Thr Leu Tyr His Val Leu Tyr 420 425 430		
Ile Gly Thr Glu Ser Gly Thr Ile Leu Lys Ala Leu Ser Thr Ala Ser 435 440 445		
Arg Ser Leu His Gly Cys Tyr Leu Glu Glu Leu His Val Leu Pro Pro 450 455 460		
Gly Arg Arg Glu Pro Leu Arg Ser Leu Arg Ile Leu His Ser Ala Arg 465 470 475 480		
Ala Leu Phe Val Gly Leu Arg Asp Gly Val Leu Arg Val Pro Leu Glu 485 490 495		
Arg Cys Ala Ala Tyr Arg Ser Gln Gly Ala Cys Leu Gly Ala Arg Asp 500 505 510		
Pro Tyr Cys Gly Trp Asp Gly Lys Gln Gln Arg Cys Ser Thr Leu Glu 515 520 525		
Asp Ser Ser Asn Met Ser Leu Trp Thr Gln Asn Ile Thr Ala Cys Pro 530 535 540		

Val Arg Asn Val Thr Arg Asp Gly Gly Phe Gly Pro Trp Ser Pro Trp
 545 550 555 560
 Gln Pro Cys Glu His Leu Asp Gly Asp Asn Ser Gly Ser Cys Leu Cys
 565 570 575
 Arg Ala Arg Ser Cys Asp Ser Pro Arg Pro Arg Cys Gly Gly Leu Asp
 580 585 590
 Cys Leu Gly Pro Ala Ile His Ile Ala Asn Cys Ser Arg Asn Gly Gly
 595 600 605
 Arg Gly Pro Arg Gly Ala Ser Trp Ala Ala Val Gln Ala Arg Pro Val
 610 615 620
 Ala Ser Gly Phe Gln Val Arg Gln Arg Ser Cys Ser Asn Pro Ala Pro
 625 630 635 640
 Arg His Gly Gly Arg Ile Cys Val Gly Lys Ser Arg Glu Glu Arg Phe
 645 650 655
 Cys Asn Glu Asn Thr Pro Cys Pro Val Pro Ile Phe Trp Ala Ser Trp
 660 665 670
 Gly Ser Trp Ser Lys Cys Ser Ser Asn Cys Gly Gly Gly Met Gln Ser
 675 680 685
 Arg Arg Arg Ala Cys Glu Asn Gly Asn Ser Cys Leu Gly Cys Gly Val
 690 695 700
 Glu Phe Lys Thr Cys Asn Pro Glu Gly Cys Pro Glu Val Arg Arg Asn
 705 710 715 720
 Thr Pro Trp Thr Pro Trp Leu Pro Val Asn Val Thr Gln Gly Gly Ala
 725 730 735
 Arg Gln Glu Gln Arg Phe Arg Phe Thr Cys Arg Ala Pro Leu Ala Asp
 740 745 750
 Pro His Gly Leu Gln Phe Gly Arg Arg Arg Thr Glu Thr Arg Thr Cys
 755 760 765
 Pro Ala Asp Gly Ser Gly Ser Cys Asp Thr Asp Ala Leu Val Glu Val
 770 775 780
 Leu Leu Arg Ser Gly Ser Thr Ser Pro His Thr Val Ser Gly Gly Trp
 785 790 795 800
 Ala Ala Trp Gly Pro Trp Ser Ser Cys Ser Arg Asp Cys Glu Leu Gly
 805 810 815
 Phe Arg Val Arg Lys Arg Thr Cys Thr Asn Pro Glu Pro Arg Asn Gly
 820 825 830
 Gly Leu Pro Cys Val Gly Asp Ala Ala Glu Tyr Gln Asp Cys Asn Pro
 835 840 845
 Gln Ala Cys Pro Val Arg Gly Ala Trp Ser Cys Trp Thr Ser Trp Ser
 850 855 860

Pro Cys Ser Ala Ser Cys Gly Gly Gly His Tyr Gln Arg Thr Arg Ser
 865 870 875 880
 Cys Thr Ser Pro Ala Pro Ser Pro Gly Glu Asp Ile Cys Leu Gly Leu
 885 890 895
 His Thr Glu Glu Ala Leu Cys Ala Thr Gln Ala Cys Pro Glu Gly Trp
 900 905 910
 Ser Pro Trp Ser Glu Trp Ser Lys Cys Thr Asp Asp Gly Ala Gln Ser
 915 920 925
 Arg Ser Arg His Cys Glu Glu Leu Leu Pro Gly Ser Ser Ala Cys Ala
 930 935 940
 Gly Asn Ser Ser Gln Ser Arg Pro Cys Pro Tyr Ser Glu Ile Arg Val
 945 950 955 960
 Ile Leu Pro Ala Ser Ser Met Glu Glu Ala Thr Asp Cys Ala Gly Phe
 965 970 975
 Asn Leu Ile His Leu Val Ala Thr Gly Ile Ser Cys Phe Leu Gly Ser
 980 985 990
 Gly Leu Leu Thr Leu Ala Val Tyr Leu Ser Cys Gln His Cys Gln Arg
 995 1000 1005
 Gln Ser Gln Glu Ser Thr Leu Val His Pro Ala Thr Pro Asn His
 1010 1015 1020
 Leu His Tyr Lys Gly Gly Gly Thr Pro Lys Asn Glu Lys Tyr Thr
 1025 1030 1035
 Pro Met Glu Phe Lys Thr Leu Asn Lys Asn Asn Leu Ile Pro Asp
 1040 1045 1050
 Asp Arg Ala Asn Phe Tyr Pro Leu Gln Gln Thr Asn Val Tyr Thr
 1055 1060 1065
 Thr Thr Tyr Tyr Pro Ser Pro Leu Asn Lys His Ser Phe Arg Pro
 1070 1075 1080
 Glu Ala Ser Pro Gly Gln Arg Cys Phe Pro Asn Ser
 1085 1090 1095

<210> 22
 <211> 1248
 <212> PRT
 <213> Homo sapiens

<400> 22
 Arg Pro Pro His Ser Gln Thr Gly Arg Gln Pro Ile Trp Leu Ala Pro
 1 5 10 15
 Ala Ala Pro Arg Arg Pro Gly Val Gly Ser Arg Gly Glu Pro Gly Thr
 20 25 30
 Cys Thr Arg Leu Trp Glu Pro Ala Trp Val Arg Val Ala Leu Gly Pro
 35 40 45

Ala Arg Ala Val Val Gly Ala Ser Gly Leu Gln Arg Arg Trp Gly Pro
 50 55 60
 Gly Thr Gln Ala Trp Arg Arg Arg Arg Thr Ser Glu Ala Glu Gly Arg
 65 70 75 80
 Arg Asp Arg Val Ser Gly Ser Ser Trp Cys Leu Ala Cys Val Ser Trp
 85 90 95
 Met Pro Cys Gly Phe Ser Pro Ser Pro Val Ala His His Leu Val Pro
 100 105 110
 Gly Pro Pro Asp Thr Pro Ala Gln Gln Leu Arg Cys Gly Trp Thr Val
 115 120 125
 Gly Gly Trp Leu Leu Ser Leu Val Arg Gly Leu Leu Pro Cys Leu Pro
 130 135 140
 Pro Gly Ala Arg Thr Ala Glu Gly Pro Ile Met Val Leu Ala Gly Pro
 145 150 155 160
 Leu Ala Val Ser Leu Leu Leu Pro Ser Leu Thr Leu Leu Val Ser His
 165 170 175
 Leu Ser Ser Ser Gln Asp Val Ser Ser Glu Pro Ser Ser Glu Gln Gln
 180 185 190
 Leu Cys Ala Leu Ser Lys His Pro Thr Val Ala Phe Glu Asp Leu Gln
 195 200 205
 Pro Trp Val Ser Asn Phe Thr Tyr Pro Gly Ala Arg Asp Phe Ser Gln
 210 215 220
 Leu Ala Leu Asp Pro Ser Gly Asn Gln Leu Ile Val Gly Ala Arg Asn
 225 230 235 240
 Tyr Leu Phe Arg Leu Ser Leu Ala Asn Val Ser Leu Leu Gln Ala Thr
 245 250 255
 Glu Trp Ala Ser Ser Glu Asp Thr Arg Arg Ser Cys Gln Ser Lys Gly
 260 265 270
 Lys Thr Glu Glu Glu Cys Gln Asn Tyr Val Arg Val Leu Ile Val Ala
 275 280 285
 Gly Arg Lys Val Phe Met Cys Gly Thr Asn Ala Phe Ser Pro Met Cys
 290 295 300
 Thr Ser Arg Gln Val Gly Asn Leu Ser Arg Thr Thr Glu Lys Ile Asn
 305 310 315 320
 Gly Val Ala Arg Cys Pro Tyr Asp Pro Arg His Asn Ser Thr Ala Val
 325 330 335
 Ile Ser Ser Gln Gly Glu Leu Tyr Ala Ala Thr Val Ile Asp Phe Ser
 340 345 350
 Gly Arg Asp Pro Ala Ile Tyr Arg Ser Leu Gly Ser Gly Pro Pro Leu
 355 360 365
 Arg Thr Ala Gln Tyr Asn Ser Lys Trp Leu Asn Glu Pro Asn Phe Val

370					375					380					
Ala	Ala	Tyr	Asp	Ile	Gly	Leu	Phe	Ala	Tyr	Phe	Phe	Leu	Arg	Glu	Asn
385					390					395					400
Ala	Val	Glu	His	Asp	Cys	Gly	Arg	Thr	Val	Tyr	Ser	Arg	Val	Ala	Arg
				405					410					415	
Val	Cys	Lys	Asn	Asp	Val	Gly	Gly	Arg	Phe	Leu	Leu	Glu	Asp	Thr	Trp
			420					425					430		
Thr	Thr	Phe	Met	Lys	Ala	Arg	Leu	Asn	Cys	Ser	Arg	Pro	Gly	Glu	Val
		435					440					445			
Pro	Phe	Tyr	Tyr	Asn	Glu	Leu	Gln	Ser	Ala	Phe	His	Leu	Pro	Glu	Gln
	450					455					460				
Asp	Leu	Ile	Tyr	Gly	Val	Phe	Thr	Thr	Asn	Val	Asn	Ser	Ile	Ala	Ala
465					470					475					480
Ser	Ala	Val	Cys	Ala	Phe	Asn	Leu	Ser	Ala	Ile	Ser	Gln	Ala	Phe	Asn
				485					490					495	
Gly	Pro	Phe	Arg	Tyr	Gln	Glu	Asn	Pro	Arg	Ala	Ala	Trp	Leu	Pro	Ile
			500					505					510		
Ala	Asn	Pro	Ile	Pro	Asn	Phe	Gln	Cys	Gly	Thr	Leu	Pro	Glu	Thr	Gly
		515					520					525			
Pro	Asn	Glu	Asn	Leu	Thr	Glu	Arg	Ser	Leu	Gln	Asp	Ala	Gln	Arg	Leu
	530					535					540				
Phe	Leu	Met	Ser	Glu	Ala	Val	Gln	Pro	Val	Thr	Pro	Glu	Pro	Cys	Val
545					550					555					560
Thr	Gln	Asp	Ser	Val	Arg	Phe	Ser	His	Leu	Val	Val	Asp	Leu	Val	Gln
				565					570					575	
Ala	Lys	Asp	Thr	Leu	Tyr	His	Val	Leu	Tyr	Ile	Gly	Thr	Glu	Ser	Gly
			580					585					590		
Thr	Ile	Leu	Lys	Ala	Leu	Ser	Thr	Ala	Ser	Arg	Ser	Leu	His	Gly	Cys
		595					600					605			
Tyr	Leu	Glu	Glu	Leu	His	Val	Leu	Pro	Pro	Gly	Arg	Arg	Glu	Pro	Leu
	610					615					620				
Arg	Ser	Leu	Arg	Ile	Leu	His	Ser	Ala	Arg	Ala	Leu	Phe	Val	Gly	Leu
625					630					635					640
Arg	Asp	Gly	Val	Leu	Arg	Val	Pro	Leu	Glu	Arg	Cys	Ala	Ala	Tyr	Arg
				645					650					655	
Ser	Gln	Gly	Ala	Cys	Leu	Gly	Ala	Arg	Asp	Pro	Tyr	Cys	Gly	Trp	Asp
			660					665					670		
Gly	Lys	Gln	Gln	Arg	Cys	Ser	Thr	Leu	Glu	Asp	Ser	Ser	Asn	Met	Ser
			675				680						685		
Leu	Trp	Thr	Gln	Asn	Ile	Thr	Ala	Cys	Pro	Val	Arg	Asn	Val	Thr	Arg
	690					695					700				

Asp Gly Gly Phe Gly Pro Trp Ser Pro Trp Gln Pro Cys Glu His Leu
 705 710 715 720
 Asp Gly Asp Asn Ser Gly Ser Cys Leu Cys Arg Ala Arg Ser Cys Asp
 725 730 735
 Ser Pro Arg Pro Arg Cys Gly Gly Leu Asp Cys Leu Gly Pro Ala Ile
 740 745 750
 His Ile Ala Asn Cys Ser Arg Asn Gly Ala Val Asp Pro Val Val Ile
 755 760 765
 Val Gly Arg Cys Ala Ala Thr Ser Cys Gly Ile Gly Phe Gln Val Arg
 770 775 780
 Gln Arg Ser Cys Ser Asn Pro Ala Pro Arg His Gly Gly Arg Ile Cys
 785 790 795 800
 Val Gly Lys Ser Arg Glu Glu Arg Phe Cys Asn Glu Asn Thr Pro Cys
 805 810 815
 Pro Val Pro Ile Phe Trp Ala Ser Trp Gly Ser Trp Ser Lys Cys Ser
 820 825 830
 Ser Asn Cys Gly Gly Gly Met Gln Ser Arg Arg Arg Ala Cys Glu Asn
 835 840 845
 Gly Asn Ser Cys Leu Gly Cys Gly Val Glu Phe Lys Thr Cys Asn Pro
 850 855 860
 Glu Gly Cys Pro Glu Val Arg Arg Asn Thr Pro Trp Thr Pro Trp Leu
 865 870 875 880
 Pro Val Asn Val Thr Gln Gly Gly Ala Arg Gln Glu Gln Arg Phe Arg
 885 890 895
 Phe Thr Cys Arg Ala Pro Leu Ala Asp Pro His Gly Leu Gln Phe Gly
 900 905 910
 Arg Arg Arg Thr Glu Thr Arg Thr Cys Pro Ala Asp Gly Ser Gly Ser
 915 920 925
 Cys Asp Thr Asp Ala Leu Val Glu Val Leu Leu Arg Ser Gly Ser Thr
 930 935 940
 Ser Pro His Thr Val Ser Gly Gly Trp Ala Ala Trp Gly Pro Trp Ser
 945 950 955 960
 Ser Cys Ser Arg Asp Cys Glu Leu Gly Phe Arg Val Arg Lys Arg Thr
 965 970 975
 Cys Thr Asn Pro Glu Pro Arg Asn Gly Gly Leu Pro Cys Val Gly Asp
 980 985 990
 Ala Ala Glu Tyr Gln Asp Cys Asn Pro Gln Ala Cys Pro Val Arg Gly
 995 1000 1005
 Ala Trp Ser Cys Trp Thr Ser Trp Ser Pro Cys Ser Ala Ser Cys
 1010 1015 1020

Gly Gly Gly His Tyr Gln Arg Thr Arg Ser Cys Thr Ser Pro Ala
 1025 1030 1035
 Pro Ser Pro Gly Glu Asp Ile Cys Leu Gly Leu His Thr Glu Glu
 1040 1045 1050
 Ala Leu Cys Ala Thr Gln Ala Cys Pro Glu Gly Trp Ser Pro Trp
 1055 1060 1065
 Ser Glu Trp Ser Lys Cys Thr Asp Asp Gly Ala Gln Ser Arg Ser
 1070 1075 1080
 Arg His Cys Glu Glu Leu Leu Pro Gly Ser Ser Ala Cys Ala Gly
 1085 1090 1095
 Asn Ser Ser Gln Ser Arg Pro Cys Pro Tyr Ser Glu Ile Arg Val
 1100 1105 1110
 Ile Leu Pro Ala Ser Ser Met Glu Glu Ala Thr Asp Cys Ala Gly
 1115 1120 1125
 Phe Asn Leu Ile His Leu Val Ala Thr Gly Ile Ser Cys Phe Leu
 1130 1135 1140
 Gly Ser Gly Leu Leu Thr Leu Ala Val Tyr Leu Ser Cys Gln His
 1145 1150 1155
 Cys Gln Arg Gln Ser Gln Glu Ser Thr Leu Val His Pro Ala Thr
 1160 1165 1170
 Pro Asn His Leu His Tyr Lys Gly Gly Gly Thr Pro Lys Asn Glu
 1175 1180 1185
 Lys Tyr Thr Pro Met Glu Phe Lys Thr Leu Asn Lys Asn Asn Leu
 1190 1195 1200
 Ile Pro Asp Asp Arg Ala Asn Phe Tyr Pro Leu Gln Gln Thr Asn
 1205 1210 1215
 Val Tyr Thr Thr Thr Tyr Tyr Pro Ser Pro Leu Asn Lys His Ser
 1220 1225 1230
 Phe Arg Pro Glu Ala Ser Pro Gly Gln Arg Cys Phe Pro Asn Ser
 1235 1240 1245

<210> 23
 <211> 1150
 <212> PRT
 <213> Homo sapiens

<400> 23
 Ala Ala Ala Pro Phe Pro Asp Arg Pro Pro Ala His Leu Val Ser Ser
 1 5 10 15
 Arg Arg Ser Ala Pro Pro Gly Ser Arg Glu Pro Arg Gly Thr Gly His
 20 25 30
 Leu His Pro Pro Leu Gly Gly Leu Leu Pro Cys Leu Pro Pro Gly Ala
 35 40 45

Arg Thr Ala Glu Gly Pro Ile Met Val Leu Ala Gly Pro Leu Ala Val
 50 55 60
 Ser Leu Leu Leu Pro Ser Leu Thr Leu Leu Val Ser His Leu Ser Ser
 65 70 75 80
 Ser Gln Asp Val Ser Ser Glu Pro Ser Ser Glu Gln Gln Leu Cys Ala
 85 90 95
 Leu Ser Lys His Pro Thr Val Ala Phe Glu Asp Leu Gln Pro Trp Val
 100 105 110
 Ser Asn Phe Thr Tyr Pro Gly Ala Arg Asp Phe Ser Gln Leu Ala Leu
 115 120 125
 Asp Pro Ser Gly Asn Gln Leu Ile Val Gly Ala Arg Asn Tyr Leu Phe
 130 135 140
 Arg Leu Ser Leu Ala Asn Val Ser Leu Leu Gln Ala Thr Glu Trp Ala
 145 150 155 160
 Ser Ser Glu Asp Thr Arg Arg Ser Cys Gln Ser Lys Gly Lys Thr Glu
 165 170 175
 Glu Glu Cys Gln Asn Tyr Val Arg Val Leu Ile Val Ala Gly Arg Lys
 180 185 190
 Val Phe Met Cys Gly Thr Asn Ala Phe Ser Pro Met Cys Thr Ser Arg
 195 200 205
 Gln Val Gly Asn Leu Ser Arg Thr Thr Glu Lys Ile Asn Gly Val Ala
 210 215 220
 Arg Cys Pro Tyr Asp Pro Arg His Asn Ser Thr Ala Val Ile Ser Ser
 225 230 235 240
 Gln Gly Glu Leu Tyr Ala Ala Thr Val Ile Asp Phe Ser Gly Arg Asp
 245 250 255
 Pro Ala Ile Tyr Arg Ser Leu Gly Ser Gly Pro Pro Leu Arg Thr Ala
 260 265 270
 Gln Tyr Asn Ser Lys Trp Leu Asn Glu Pro Asn Phe Val Ala Ala Tyr
 275 280 285
 Asp Ile Gly Leu Phe Ala Tyr Phe Phe Leu Arg Glu Asn Ala Val Glu
 290 295 300
 His Asp Cys Gly Arg Thr Val Tyr Ser Arg Val Ala Arg Val Cys Lys
 305 310 315 320
 Asn Asp Val Gly Gly Arg Phe Leu Leu Glu Asp Thr Trp Thr Thr Phe
 325 330 335
 Met Lys Ala Arg Leu Asn Cys Ser Arg Pro Gly Glu Val Pro Phe Tyr
 340 345 350
 Tyr Asn Glu Leu Gln Ser Ala Phe His Leu Pro Glu Gln Asp Leu Ile
 355 360 365

Tyr Gly Val Phe Thr Thr Asn Val Asn Ser Ile Ala Ala Ser Ala Val
 370 375 380
 Cys Ala Phe Asn Leu Ser Ala Ile Ser Gln Ala Phe Asn Gly Pro Phe
 385 390 395 400
 Arg Tyr Gln Glu Asn Pro Arg Ala Ala Trp Leu Pro Ile Ala Asn Pro
 405 410 415
 Ile Pro Asn Phe Gln Cys Gly Thr Leu Pro Glu Thr Gly Pro Asn Glu
 420 425 430
 Asn Leu Thr Glu Arg Ser Leu Gln Asp Ala Gln Arg Leu Phe Leu Met
 435 440 445
 Ser Glu Ala Val Gln Pro Val Thr Pro Glu Pro Cys Val Thr Gln Asp
 450 455 460
 Ser Val Arg Phe Ser His Leu Val Val Asp Leu Val Gln Ala Lys Asp
 465 470 475 480
 Thr Leu Tyr His Val Leu Tyr Ile Gly Thr Glu Ser Gly Thr Ile Leu
 485 490 495
 Lys Ala Leu Ser Thr Ala Ser Arg Ser Leu His Gly Cys Tyr Leu Glu
 500 505 510
 Glu Leu His Val Leu Pro Pro Gly Arg Arg Glu Pro Leu Arg Ser Leu
 515 520 525
 Arg Ile Leu His Ser Ala Arg Ala Leu Phe Val Gly Leu Arg Asp Gly
 530 535 540
 Val Leu Arg Val Pro Leu Glu Arg Cys Ala Ala Tyr Arg Ser Gln Gly
 545 550 555 560
 Ala Cys Leu Gly Ala Arg Asp Pro Tyr Cys Gly Trp Asp Gly Lys Gln
 565 570 575
 Gln Arg Cys Ser Thr Leu Glu Asp Ser Ser Asn Met Ser Leu Trp Thr
 580 585 590
 Gln Asn Ile Thr Ala Cys Pro Val Arg Asn Val Thr Arg Asp Gly Gly
 595 600 605
 Phe Gly Pro Trp Ser Pro Trp Gln Pro Cys Glu His Leu Asp Gly Asp
 610 615 620
 Asn Ser Gly Ser Cys Leu Cys Arg Ala Arg Ser Cys Asp Ser Pro Arg
 625 630 635 640
 Pro Arg Cys Gly Gly Leu Asp Cys Leu Gly Pro Ala Ile His Ile Ala
 645 650 655
 Asn Cys Ser Arg Asn Gly Ala Val Asp Pro Val Val His Arg Gly Pro
 660 665 670
 Leu Cys Ser His Val Leu Trp His Ala Ala Ser Arg Ser Ala Ser Glu
 675 680 685
 Val Ala Ala Thr Leu Leu Pro Ala Thr Gly Ala Ala Ser Ala Trp Ala

690	695	700
Arg Ala Trp Glu Glu 705	Arg Phe Cys Asn Glu 710	Asn Thr Pro Cys Pro Val 715 720
Pro Ile Phe Trp 725	Ala Ser Trp Gly Ser 730	Trp Ser Lys Cys Ser Ser Asn 735
Cys Gly Gly Gly Met 740	Gln Ser Arg Arg Arg 745	Ala Cys Glu Asn Gly Asn 750
Ser Cys Leu Gly Cys 755	Gly Val Glu Phe Lys Thr 760	Cys Asn Pro Glu Gly 765
Cys Pro Glu Val Arg 770	Arg Asn Thr Pro Trp Thr 775	Pro Trp Leu Pro Val 780
Asn Val Thr Gln Gly 785	Gly Ala Arg Gln Glu 790	Gln Arg Phe Arg Phe Thr 795 800
Cys Arg Ala Pro 805	Leu Ala Asp Pro His 810	Gly Leu Gln Phe Gly Arg Arg 815
Arg Thr Glu Thr 820	Arg Thr Cys Pro Ala Asp 825	Gly Ser Gly Ser Cys Asp 830
Thr Asp Ala Leu Val 835	Glu Val Leu Leu Arg 840	Ser Gly Ser Thr Ser Pro 845
His Thr Val Ser Gly 850	Gly Trp Ala Ala Trp 855	Gly Pro Trp Ser Ser Cys 860
Ser Arg Asp Cys Glu 865	Leu Gly Phe Arg Val 870	Arg Lys Arg Thr Cys Thr 875 880
Asn Pro Glu Pro 885	Arg Asn Gly Gly Leu 890	Pro Cys Val Gly Asp Ala Ala 895
Glu Tyr Gln Asp Cys 900	Asn Pro Gln Ala Cys 905	Pro Val Arg Gly Ala Trp 910
Ser Cys Trp Thr Ser 915	Trp Ser Pro Cys Ser 920	Ala Ser Cys Gly Gly Gly 925
His Tyr Gln Arg Thr 930	Arg Ser Cys Thr Ser 935	Pro Ala Pro Ser Pro Gly 940
Glu Asp Ile Cys Leu 945	Gly Leu His Thr Glu 950	Glu Ala Leu Cys Ala Thr 955 960
Gln Ala Cys Pro Glu 965	Gly Trp Ser Pro Trp 970	Ser Glu Trp Ser Lys Cys 975
Thr Asp Asp Gly Ala 980	Gln Ser Arg Ser Arg 985	His Cys Glu Glu Leu Leu 990
Pro Gly Ser Ser Ala 995	Cys Ala Gly Asn Ser 1000	Ser Ser Gln Ser Arg Pro Cys 1005
Pro Tyr Ser Glu Ile 1010	Arg Val Ile Leu Pro 1015	Ala Ser Ser Met Glu 1020

Glu Ala Thr Asp Cys Ala Gly Phe Asn Leu Ile His Leu Val Ala
1025 1030 1035

Thr Gly Ile Ser Cys Phe Leu Gly Ser Gly Leu Leu Thr Leu Ala
1040 1045 1050

Val Tyr Leu Ser Cys Gln His Cys Gln Arg Gln Ser Gln Glu Ser
1055 1060 1065

Thr Leu Val His Pro Ala Thr Pro Asn His Leu His Tyr Lys Gly
1070 1075 1080

Gly Gly Thr Pro Lys Asn Glu Lys Tyr Thr Pro Met Glu Phe Lys
1085 1090 1095

Thr Leu Asn Lys Asn Asn Leu Ile Pro Asp Asp Arg Ala Asn Phe
1100 1105 1110

Tyr Pro Leu Gln Gln Thr Asn Val Tyr Thr Thr Thr Tyr Tyr Pro
1115 1120 1125

Ser Pro Leu Asn Lys His Ser Phe Arg Pro Glu Ala Ser Pro Gly
1130 1135 1140

Gln Arg Cys Phe Pro Asn Ser
1145 1150

<210> 24

<211> 1211

<212> PRT

<213> Homo sapiens

<400> 24

Ala Ala Ala Pro Phe Pro Asp Arg Pro Pro Ala His Leu Val Ser Ser
1 5 10 15

Arg Arg Ser Ala Pro Pro Gly Ser Arg Glu Pro Arg Gly Thr Gly His
20 25 30

Leu His Pro Pro Leu Gly Val Ser Gly Ser Ser Trp Cys Leu Ala Cys
35 40 45

Val Ser Trp Met Pro Cys Gly Phe Ser Pro Ser Pro Val Ala His His
50 55 60

Leu Val Pro Gly Pro Pro Asp Thr Pro Ala Gln Gln Leu Arg Cys Gly
65 70 75 80

Trp Thr Val Gly Gly Trp Leu Leu Ser Leu Val Arg Gly Leu Leu Pro
85 90 95

Cys Leu Pro Pro Gly Ala Arg Thr Ala Glu Gly Pro Ile Met Val Leu
100 105 110

Ala Gly Pro Leu Ala Val Ser Leu Leu Leu Pro Ser Leu Thr Leu Leu
115 120 125

Val Ser His Leu Ser Ser Ser Gln Asp Val Ser Ser Glu Pro Ser Ser
130 135 140

Glu Gln Gln Leu Cys Ala Leu Ser Lys His Pro Thr Val Ala Phe Glu
 145 150 155 160
 Asp Leu Gln Pro Trp Val Ser Asn Phe Thr Tyr Pro Gly Ala Arg Asp
 165 170 175
 Phe Ser Gln Leu Ala Leu Asp Pro Ser Gly Asn Gln Leu Ile Val Gly
 180 185 190
 Ala Arg Asn Tyr Leu Phe Arg Leu Ser Leu Ala Asn Val Ser Leu Leu
 195 200 205
 Gln Ala Thr Glu Trp Ala Ser Ser Glu Asp Thr Arg Arg Ser Cys Gln
 210 215 220
 Ser Lys Gly Lys Thr Glu Glu Glu Cys Gln Asn Tyr Val Arg Val Leu
 225 230 235 240
 Ile Val Ala Gly Arg Lys Val Phe Met Cys Gly Thr Asn Ala Phe Ser
 245 250 255
 Pro Met Cys Thr Ser Arg Gln Val Gly Asn Leu Ser Arg Thr Thr Glu
 260 265 270
 Lys Ile Asn Gly Val Ala Arg Cys Pro Tyr Asp Pro Arg His Asn Ser
 275 280 285
 Thr Ala Val Ile Ser Ser Gln Gly Glu Leu Tyr Ala Ala Thr Val Ile
 290 295 300
 Asp Phe Ser Gly Arg Asp Pro Ala Ile Tyr Arg Ser Leu Gly Ser Gly
 305 310 315 320
 Pro Pro Leu Arg Thr Ala Gln Tyr Asn Ser Lys Trp Leu Asn Glu Pro
 325 330 335
 Asn Phe Val Ala Ala Tyr Asp Ile Gly Leu Phe Ala Tyr Phe Phe Leu
 340 345 350
 Arg Glu Asn Ala Val Glu His Asp Cys Gly Arg Thr Val Tyr Ser Arg
 355 360 365
 Val Ala Arg Val Cys Lys Asn Asp Val Gly Gly Arg Phe Leu Leu Glu
 370 375 380
 Asp Thr Trp Thr Thr Phe Met Lys Ala Arg Leu Asn Cys Ser Arg Pro
 385 390 395 400
 Gly Glu Val Pro Phe Tyr Tyr Asn Glu Leu Gln Ser Ala Phe His Leu
 405 410 415
 Pro Glu Gln Asp Leu Ile Tyr Gly Val Phe Thr Thr Asn Val Asn Ser
 420 425 430
 Ile Ala Ala Ser Ala Val Cys Ala Phe Asn Leu Ser Ala Ile Ser Gln
 435 440 445
 Ala Phe Asn Gly Pro Phe Arg Tyr Gln Glu Asn Pro Arg Ala Ala Trp
 450 455 460

Leu Pro Ile Ala Asn Pro Ile Pro Asn Phe Gln Cys Gly Thr Leu Pro
 465 470 475 480
 Glu Thr Gly Pro Asn Glu Asn Leu Thr Glu Arg Ser Leu Gln Asp Ala
 485 490 495
 Gln Arg Leu Phe Leu Met Ser Glu Ala Val Gln Pro Val Thr Pro Glu
 500 505 510
 Pro Cys Val Thr Gln Asp Ser Val Arg Phe Ser His Leu Val Val Asp
 515 520 525
 Leu Val Gln Ala Lys Asp Thr Leu Tyr His Val Leu Tyr Ile Gly Thr
 530 535 540
 Glu Ser Gly Thr Ile Leu Lys Ala Leu Ser Thr Ala Ser Arg Ser Leu
 545 550 555 560
 His Gly Cys Tyr Leu Glu Glu Leu His Val Leu Pro Pro Gly Arg Arg
 565 570 575
 Glu Pro Leu Arg Ser Leu Arg Ile Leu His Ser Ala Arg Ala Leu Phe
 580 585 590
 Val Gly Leu Arg Asp Gly Val Leu Arg Val Pro Leu Glu Arg Cys Ala
 595 600 605
 Ala Tyr Arg Ser Gln Gly Ala Cys Leu Gly Ala Arg Asp Pro Tyr Cys
 610 615 620
 Gly Trp Asp Gly Lys Gln Gln Arg Cys Ser Thr Leu Glu Asp Ser Ser
 625 630 635 640
 Asn Met Ser Leu Trp Thr Gln Asn Ile Thr Ala Cys Pro Val Arg Asn
 645 650 655
 Val Thr Arg Asp Gly Gly Phe Gly Pro Trp Ser Pro Trp Gln Pro Cys
 660 665 670
 Glu His Leu Asp Gly Asp Asn Ser Gly Ser Cys Leu Cys Arg Ala Arg
 675 680 685
 Ser Cys Asp Ser Pro Arg Pro Arg Cys Gly Gly Leu Asp Cys Leu Gly
 690 695 700
 Pro Ala Ile His Ile Ala Asn Cys Ser Arg Asn Gly Ala Val Asp Pro
 705 710 715 720
 Val Val Ile Val Gly Arg Cys Ala Ala Thr Ser Cys Gly Ile Gly Phe
 725 730 735
 Gln Val Arg Gln Arg Ser Cys Ser Asn Pro Ala Pro Arg His Gly Gly
 740 745 750
 Arg Ile Cys Val Gly Lys Ser Arg Glu Glu Arg Phe Cys Asn Glu Asn
 755 760 765
 Thr Pro Cys Pro Val Pro Ile Phe Trp Ala Ser Trp Gly Ser Trp Ser
 770 775 780
 Lys Cys Ser Ser Asn Cys Gly Gly Gly Met Gln Ser Arg Arg Arg Ala

785		790		795		800
Cys Glu Asn Gly	Asn Ser Cys Leu Gly	Cys Gly Val Glu Phe	Lys Thr			
	805	810	815			
Cys Asn Pro Glu	Gly Cys Pro Glu Val	Arg Arg Asn Thr	Pro Trp Thr			
	820	825	830			
Pro Trp Leu Pro	Val Asn Val Thr Gln Gly Gly	Ala Arg Gln Glu Gln				
	835	840	845			
Arg Phe Arg Phe	Thr Cys Arg Ala Pro Leu Ala	Asp Pro His Gly Leu				
	850	855	860			
Gln Phe Gly Arg	Arg Arg Thr Glu Thr Arg Thr	Cys Pro Ala Asp Gly				
865	870	875	880			
Ser Gly Ser Cys	Asp Thr Asp Ala Leu Val Glu Val	Leu Leu Arg Ser				
	885	890	895			
Gly Ser Thr Ser	Pro His Thr Val Ser Gly Gly	Trp Ala Ala Trp Gly				
	900	905	910			
Pro Trp Ser Ser	Cys Ser Arg Asp Cys Glu Leu Gly	Phe Arg Val Arg				
	915	920	925			
Lys Arg Thr Cys	Thr Asn Pro Glu Pro Arg Asn Gly	Gly Leu Pro Cys				
	930	935	940			
Val Gly Asp Ala	Ala Glu Tyr Gln Asp Cys Asn Pro	Gln Ala Cys Pro				
945	950	955	960			
Val Arg Gly Ala	Trp Ser Cys Trp Thr Ser Trp Ser	Pro Cys Ser Ala				
	965	970	975			
Ser Cys Gly Gly	Gly His Tyr Gln Arg Thr Arg Ser	Cys Thr Ser Pro				
	980	985	990			
Ala Pro Ser Pro	Gly Glu Asp Ile Cys Leu Gly Leu	His Thr Glu Glu				
	995	1000	1005			
Ala Leu Cys Ala	Thr Gln Ala Cys Pro Glu Gly Trp	Ser Pro Trp				
	1010	1015	1020			
Ser Glu Trp Ser	Lys Cys Thr Asp Asp Gly Ala Gln	Ser Arg Ser				
	1025	1030	1035			
Arg His Cys Glu	Glu Leu Leu Pro Gly Ser Ser	Ala Cys Ala Gly				
	1040	1045	1050			
Asn Ser Ser Gln	Ser Arg Pro Cys Pro Tyr Ser Glu	Ile Arg Val				
	1055	1060	1065			
Ile Leu Pro Ala	Ser Ser Met Glu Glu Ala Thr Asp	Cys Ala Gly				
	1070	1075	1080			
Phe Asn Leu Ile	His Leu Val Ala Thr Gly Ile Ser	Cys Phe Leu				
	1085	1090	1095			
Gly Ser Gly Leu	Leu Thr Leu Ala Val Tyr Leu Ser	Cys Gln His				
	1100	1105	1110			

Cys Gln Arg Gln Ser Gln Glu Ser Thr Leu Val His Pro Ala Thr
 1115 1120 1125
 Pro Asn His Leu His Tyr Lys Gly Gly Gly Thr Pro Lys Asn Glu
 1130 1135 1140
 Lys Tyr Thr Pro Met Glu Phe Lys Thr Leu Asn Lys Asn Asn Leu
 1145 1150 1155
 Ile Pro Asp Asp Arg Ala Asn Phe Tyr Pro Leu Gln Gln Thr Asn
 1160 1165 1170
 Ala Ser Ala Gly Tyr Pro Pro Leu Pro Gly Ser Leu Tyr Ser Thr
 1175 1180 1185
 Gln Gly Ile Pro Leu Val Arg Gly Ser Glu Tyr Trp Glu Leu Glu
 1190 1195 1200
 Ala Asp Leu Cys Leu Glu Val Leu
 1205 1210

<210> 25
 <211> 1203
 <212> PRT
 <213> Homo sapiens

<400> 25

Ala Ala Ala Pro Phe Pro Asp Arg Pro Pro Ala His Leu Val Ser Ser
 1 5 10 15
 Arg Arg Ser Ala Pro Pro Gly Ser Arg Glu Pro Arg Gly Thr Gly His
 20 25 30
 Leu His Pro Pro Leu Gly Val Ser Gly Ser Ser Trp Cys Leu Ala Cys
 35 40 45
 Val Ser Trp Met Pro Cys Gly Phe Ser Pro Ser Pro Val Ala His His
 50 55 60
 Leu Val Pro Gly Pro Pro Asp Thr Pro Ala Gln Gln Leu Arg Cys Gly
 65 70 75 80
 Trp Thr Val Gly Gly Trp Leu Leu Ser Leu Val Arg Gly Leu Leu Pro
 85 90 95
 Cys Leu Pro Pro Gly Ala Arg Thr Ala Glu Gly Pro Ile Met Val Leu
 100 105 110
 Ala Gly Pro Leu Ala Val Ser Leu Leu Leu Pro Ser Leu Thr Leu Leu
 115 120 125
 Val Ser His Leu Ser Ser Ser Gln Asp Val Ser Ser Glu Pro Ser Ser
 130 135 140
 Glu Gln Gln Leu Cys Ala Leu Ser Lys His Pro Thr Val Ala Phe Glu
 145 150 155 160
 Asp Leu Gln Pro Trp Val Ser Asn Phe Thr Tyr Pro Gly Ala Arg Asp

165							170							175						
Phe	Ser	Gln	Leu	Ala	Leu	Asp	Pro	Ser	Gly	Asn	Gln	Leu	Ile	Val	Gly					
			180						185					190						
Ala	Arg	Asn	Tyr	Leu	Phe	Arg	Leu	Ser	Leu	Ala	Asn	Val	Ser	Leu	Leu					
		195					200					205								
Gln	Ala	Thr	Glu	Trp	Ala	Ser	Ser	Glu	Asp	Thr	Arg	Arg	Ser	Cys	Gln					
	210					215					220									
Ser	Lys	Gly	Lys	Thr	Glu	Glu	Glu	Cys	Gln	Asn	Tyr	Val	Arg	Val	Leu					
225					230					235					240					
Ile	Val	Ala	Gly	Arg	Lys	Val	Phe	Met	Cys	Gly	Thr	Asn	Ala	Phe	Ser					
				245					250					255						
Pro	Met	Cys	Thr	Ser	Arg	Gln	Val	Gly	Asn	Leu	Ser	Arg	Thr	Thr	Glu					
			260					265					270							
Lys	Ile	Asn	Gly	Val	Ala	Arg	Cys	Pro	Tyr	Asp	Pro	Arg	His	Asn	Ser					
		275					280					285								
Thr	Ala	Val	Ile	Ser	Ser	Gln	Gly	Glu	Leu	Tyr	Ala	Ala	Thr	Val	Ile					
	290					295					300									
Asp	Phe	Ser	Gly	Arg	Asp	Pro	Ala	Ile	Tyr	Arg	Ser	Leu	Gly	Ser	Gly					
305					310					315					320					
Pro	Pro	Leu	Arg	Thr	Ala	Gln	Tyr	Asn	Ser	Lys	Trp	Leu	Asn	Glu	Pro					
				325					330					335						
Asn	Phe	Val	Ala	Ala	Tyr	Asp	Ile	Gly	Leu	Phe	Ala	Tyr	Phe	Phe	Leu					
			340					345					350							
Arg	Glu	Asn	Ala	Val	Glu	His	Asp	Cys	Gly	Arg	Thr	Val	Tyr	Ser	Arg					
		355					360					365								
Val	Ala	Arg	Val	Cys	Lys	Asn	Asp	Val	Gly	Gly	Arg	Phe	Leu	Leu	Glu					
	370					375					380									
Asp	Thr	Trp	Thr	Thr	Phe	Met	Lys	Ala	Arg	Leu	Asn	Cys	Ser	Arg	Pro					
385					390					395					400					
Gly	Glu	Val	Pro	Phe	Tyr	Tyr	Asn	Glu	Leu	Gln	Ser	Ala	Phe	His	Leu					
				405					410					415						
Pro	Glu	Gln	Asp	Leu	Ile	Tyr	Gly	Val	Phe	Thr	Thr	Asn	Val	Asn	Ser					
			420					425					430							
Ile	Ala	Ala	Ser	Ala	Val	Cys	Ala	Phe	Asn	Leu	Ser	Ala	Ile	Ser	Gln					
		435					440					445								
Ala	Phe	Asn	Gly	Pro	Phe	Arg	Tyr	Gln	Glu	Asn	Pro	Arg	Ala	Ala	Trp					
						455					460									
Leu	Pro	Ile	Ala	Asn	Pro	Ile	Pro	Asn	Phe	Gln	Cys	Gly	Thr							

Gln Arg Leu Phe Leu Met Ser Glu Ala Val Gln Pro Val Thr Pro Glu
 500 505 510
 Pro Cys Val Thr Gln Asp Ser Val Arg Phe Ser His Leu Val Val Asp
 515 520 525
 Leu Val Gln Ala Lys Asp Thr Leu Tyr His Val Leu Tyr Ile Gly Thr
 530 535 540
 Glu Ser Gly Thr Ile Leu Lys Ala Leu Ser Thr Ala Ser Arg Ser Leu
 545 550 555 560
 His Gly Cys Tyr Leu Glu Glu Leu His Val Leu Pro Pro Gly Arg Arg
 565 570 575
 Glu Pro Leu Arg Ser Leu Arg Ile Leu His Ser Ala Arg Ala Leu Phe
 580 585 590
 Val Gly Leu Arg Asp Gly Val Leu Arg Val Pro Leu Glu Arg Cys Ala
 595 600 605
 Ala Tyr Arg Ser Gln Gly Ala Cys Leu Gly Ala Arg Asp Pro Tyr Cys
 610 615 620
 Gly Trp Asp Gly Lys Gln Gln Arg Cys Ser Thr Leu Glu Asp Ser Ser
 625 630 635 640
 Asn Met Ser Leu Trp Thr Gln Asn Ile Thr Ala Cys Pro Val Arg Asn
 645 650 655
 Val Thr Arg Asp Gly Gly Phe Gly Pro Trp Ser Pro Trp Gln Pro Cys
 660 665 670
 Glu His Leu Asp Gly Asp Asn Ser Gly Ser Cys Leu Cys Arg Ala Arg
 675 680 685
 Ser Cys Asp Ser Pro Arg Pro Arg Cys Gly Gly Leu Asp Cys Leu Gly
 690 695 700
 Pro Ala Ile His Ile Ala Asn Cys Ser Arg Asn Gly Ala Val Asp Pro
 705 710 715 720
 Val Val Ile Val Gly Arg Cys Ala Ala Thr Ser Cys Gly Ile Gly Phe
 725 730 735
 Gln Val Arg Gln Arg Ser Cys Ser Asn Pro Ala Pro Arg His Gly Gly
 740 745 750
 Arg Ile Cys Val Gly Lys Ser Arg Glu Glu Arg Phe Cys Asn Glu Asn
 755 760 765
 Thr Pro Cys Pro Val Pro Ile Phe Trp Ala Ser Trp Gly Ser Trp Ser
 770 775 780
 Lys Cys Ser Ser Asn Cys Gly Gly Gly Met Gln Ser Arg Arg Arg Ala
 785 790 795 800
 Cys Glu Asn Gly Asn Ser Cys Leu Gly Cys Gly Val Glu Phe Lys Thr
 805 810 815

Cys Asn Pro Glu Gly Cys Pro Glu Val Arg Arg Asn Thr Pro Trp Thr
 820 825 830
 Pro Trp Leu Pro Val Asn Val Thr Gln Gly Gly Ala Arg Gln Glu Gln
 835 840 845
 Arg Phe Arg Phe Thr Cys Arg Ala Pro Leu Ala Asp Pro His Gly Leu
 850 855 860
 Gln Phe Gly Arg Arg Arg Thr Glu Thr Arg Thr Cys Pro Ala Asp Gly
 865 870 875 880
 Ser Gly Ser Cys Asp Thr Asp Ala Leu Val Glu Val Leu Leu Arg Ser
 885 890 895
 Gly Ser Thr Ser Pro His Thr Val Ser Gly Gly Trp Ala Ala Trp Gly
 900 905 910
 Pro Trp Ser Ser Cys Ser Arg Asp Cys Glu Leu Gly Phe Arg Val Arg
 915 920 925
 Lys Arg Thr Cys Thr Asn Pro Glu Pro Arg Asn Gly Gly Leu Pro Cys
 930 935 940
 Val Gly Asp Ala Ala Glu Tyr Gln Asp Cys Asn Pro Gln Ala Cys Pro
 945 950 955 960
 Val Arg Gly Ala Trp Ser Cys Trp Thr Ser Trp Ser Pro Cys Ser Ala
 965 970 975
 Ser Cys Gly Gly Gly His Tyr Gln Arg Thr Arg Ser Cys Thr Ser Pro
 980 985 990
 Ala Pro Ser Pro Gly Glu Asp Ile Cys Leu Gly Leu His Thr Glu Glu
 995 1000 1005
 Ala Leu Cys Ala Thr Gln Ala Cys Pro Glu Gly Trp Ser Pro Trp
 1010 1015 1020
 Ser Glu Trp Ser Lys Cys Thr Asp Asp Gly Ala Gln Ser Arg Ser
 1025 1030 1035
 Arg His Cys Glu Glu Leu Leu Pro Gly Ser Ser Ala Cys Ala Gly
 1040 1045 1050
 Asn Ser Ser Gln Ser Arg Pro Cys Pro Tyr Ser Glu Ile Arg Val
 1055 1060 1065
 Ile Leu Pro Ala Ser Ser Met Glu Glu Ala Thr Asp Cys Ala Gly
 1070 1075 1080
 Phe Asn Leu Ile His Leu Val Ala Thr Gly Ile Ser Cys Phe Leu
 1085 1090 1095
 Gly Ser Gly Leu Leu Thr Leu Ala Val Tyr Leu Ser Cys Gln His
 1100 1105 1110
 Cys Gln Arg Gln Ser Gln Glu Ser Thr Leu Val His Pro Ala Thr
 1115 1120 1125
 Pro Asn His Leu His Tyr Lys Gly Gly Gly Thr Pro Lys Asn Glu

1130 1135 1140
 Lys Tyr Thr Pro Met Glu Phe Lys Thr Leu Asn Lys Asn Asn Leu
 1145 1150 1155
 Ile Pro Asp Asp Arg Ala Asn Phe Tyr Pro Leu Gln Gln Thr Asn
 1160 1165 1170
 Val Tyr Thr Thr Thr Tyr Tyr Pro Ser Pro Leu Asn Lys His Ser
 1175 1180 1185
 Phe Arg Pro Glu Ala Ser Pro Gly Gln Arg Cys Phe Pro Asn Ser
 1190 1195 1200

 <210> 26
 <211> 1240
 <212> PRT
 <213> Homo sapiens

 <400> 26
 Ala Ala Ala Pro Phe Pro Asp Arg Pro Pro Ala His Leu Val Ser Ser
 1 5 10 15
 Arg Arg Ser Ala Pro Pro Gly Ser Arg Glu Pro Arg Gly Thr Gly His
 20 25 30
 Leu His Pro Pro Leu Gly Val Ser Gly Ser Ser Trp Cys Leu Ala Cys
 35 40 45
 Val Ser Trp Met Pro Cys Gly Phe Ser Pro Ser Pro Val Ala His His
 50 55 60
 Leu Val Pro Gly Pro Pro Asp Thr Pro Ala Gln Gln Leu Arg Cys Gly
 65 70 75 80
 Trp Thr Val Gly Gly Trp Leu Leu Ser Leu Val Arg Gly Arg Lys Pro
 85 90 95
 Ser Gly Asp Phe Glu Trp Arg Gln Gly Trp Arg Gly Pro Gly Glu Glu
 100 105 110
 Asp Trp Pro Glu Ser Pro Ser Pro Lys Val Leu Met Asp Ser Ala Gly
 115 120 125
 Gly Leu Leu Pro Cys Leu Pro Pro Gly Ala Arg Thr Ala Glu Gly Pro
 130 135 140
 Ile Met Val Leu Ala Gly Pro Leu Ala Val Ser Leu Leu Leu Pro Ser
 145 150 155 160
 Leu Thr Leu Leu Val Ser His Leu Ser Ser Ser Gln Asp Val Ser Ser
 165 170 175
 Glu Pro Ser Ser Glu Gln Gln Leu Cys Ala Leu Ser Lys His Pro Thr
 180 185 190
 Val Ala Phe Glu Asp Leu Gln Pro Trp Val Ser Asn Phe Thr Tyr Pro
 195 200 205
 Gly Ala Arg Asp Phe Ser Gln Leu Ala Leu Asp Pro Ser Gly Asn Gln

210	215	220
Leu Ile Val Gly Ala Arg Asn Tyr Leu Phe Arg Leu Ser Leu Ala Asn 225 230 235 240		
Val Ser Leu Leu Gln Ala Thr Glu Trp Ala Ser Ser Glu Asp Thr Arg 245 250 255		
Arg Ser Cys Gln Ser Lys Gly Lys Thr Glu Glu Glu Cys Gln Asn Tyr 260 265 270		
Val Arg Val Leu Ile Val Ala Gly Arg Lys Val Phe Met Cys Gly Thr 275 280 285		
Asn Ala Phe Ser Pro Met Cys Thr Ser Arg Gln Val Gly Asn Leu Ser 290 295 300		
Arg Thr Thr Glu Lys Ile Asn Gly Val Ala Arg Cys Pro Tyr Asp Pro 305 310 315 320		
Arg His Asn Ser Thr Ala Val Ile Ser Ser Gln Gly Glu Leu Tyr Ala 325 330 335		
Ala Thr Val Ile Asp Phe Ser Gly Arg Asp Pro Ala Ile Tyr Arg Ser 340 345 350		
Leu Gly Ser Gly Pro Pro Leu Arg Thr Ala Gln Tyr Asn Ser Lys Trp 355 360 365		
Leu Asn Glu Pro Asn Phe Val Ala Ala Tyr Asp Ile Gly Leu Phe Ala 370 375 380		
Tyr Phe Phe Leu Arg Glu Asn Ala Val Glu His Asp Cys Gly Arg Thr 385 390 395 400		
Val Tyr Ser Arg Val Ala Arg Val Cys Lys Asn Asp Val Gly Gly Arg 405 410 415		
Phe Leu Leu Glu Asp Thr Trp Thr Thr Phe Met Lys Ala Arg Leu Asn 420 425 430		
Cys Ser Arg Pro Gly Glu Val Pro Phe Tyr Tyr Asn Glu Leu Gln Ser 435 440 445		
Ala Phe His Leu Pro Glu Gln Asp Leu Ile Tyr Gly Val Phe Thr Thr 450 455 460		
Asn Val Asn Ser Ile Ala Ala Ser Ala Val Cys Ala Phe Asn Leu Ser 465 470 475 480		
Ala Ile Ser Gln Ala Phe Asn Gly Pro Phe Arg Tyr Gln Glu Asn Pro 485 490 495		
Arg Ala Ala Trp Leu Pro Ile Ala Asn Pro Ile Pro Asn Phe Gln Cys 500 505 510		
Gly Thr Leu Pro Glu Thr Gly Pro Asn Glu Asn Leu Thr Glu Arg Ser 515 520 525		
Leu Gln Asp Ala Gln Arg Leu Phe Leu Met Ser Glu Ala Val Gln Pro 530 535 540		

Val Thr Pro Glu Pro Cys Val Thr Gln Asp Ser Val Arg Phe Ser His
 545 550 555 560
 Leu Val Val Asp Leu Val Gln Ala Lys Asp Thr Leu Tyr His Val Leu
 565 570 575
 Tyr Ile Gly Thr Glu Ser Gly Thr Ile Leu Lys Ala Leu Ser Thr Ala
 580 585 590
 Ser Arg Ser Leu His Gly Cys Tyr Leu Glu Glu Leu His Val Leu Pro
 595 600 605
 Pro Gly Arg Arg Glu Pro Leu Arg Ser Leu Arg Ile Leu His Ser Ala
 610 615 620
 Arg Ala Leu Phe Val Gly Leu Arg Asp Gly Val Leu Arg Val Pro Leu
 625 630 635 640
 Glu Arg Cys Ala Ala Tyr Arg Ser Gln Gly Ala Cys Leu Gly Ala Arg
 645 650 655
 Asp Pro Tyr Cys Gly Trp Asp Gly Lys Gln Gln Arg Cys Ser Thr Leu
 660 665 670
 Glu Asp Ser Ser Asn Met Ser Leu Trp Thr Gln Asn Ile Thr Ala Cys
 675 680 685
 Pro Val Arg Asn Val Thr Arg Asp Gly Gly Phe Gly Pro Trp Ser Pro
 690 695 700
 Trp Gln Pro Cys Glu His Leu Asp Gly Asp Asn Ser Gly Ser Cys Leu
 705 710 715 720
 Cys Arg Ala Arg Ser Cys Asp Ser Pro Arg Pro Arg Cys Gly Gly Leu
 725 730 735
 Asp Cys Leu Gly Pro Ala Ile His Ile Ala Asn Cys Ser Arg Asn Gly
 740 745 750
 Gly Arg Gly Pro Arg Gly Ala Ser Trp Ala Ala Val Gln Ala Arg Pro
 755 760 765
 Val Ala Ser Gly Phe Gln Val Arg Gln Arg Ser Cys Ser Asn Pro Ala
 770 775 780
 Pro Arg His Gly Gly Arg Ile Cys Val Gly Lys Ser Arg Glu Glu Arg
 785 790 795 800
 Phe Cys Asn Glu Asn Thr Pro Cys Pro Val Pro Ile Phe Trp Ala Ser
 805 810 815
 Trp Gly Ser Trp Ser Lys Cys Ser Ser Asn Cys Gly Gly Gly Met Gln
 820 825 830
 Ser Arg Arg Arg Ala Cys Glu Asn Gly Asn Ser Cys Leu Gly Cys Gly
 835 840 845
 Val Glu Phe Lys Thr Cys Asn Pro Glu Gly Cys Pro Glu Val Arg Arg
 850 855 860

Asn Thr Pro Trp Thr Pro Trp Leu Pro Val Asn Val Thr Gln Gly Gly
 865 870 875 880
 Ala Arg Gln Glu Gln Arg Phe Arg Phe Thr Cys Arg Ala Pro Leu Ala
 885 890 895
 Asp Pro His Gly Leu Gln Phe Gly Arg Arg Arg Thr Glu Thr Arg Thr
 900 905 910
 Cys Pro Ala Asp Gly Ser Gly Ser Cys Asp Thr Asp Ala Leu Val Glu
 915 920 925
 Val Leu Leu Arg Ser Gly Ser Thr Ser Pro His Thr Val Ser Gly Gly
 930 935 940
 Trp Ala Ala Trp Gly Pro Trp Ser Ser Cys Ser Arg Asp Cys Glu Leu
 945 950 955 960
 Gly Phe Arg Val Arg Lys Arg Thr Cys Thr Asn Pro Glu Pro Arg Asn
 965 970 975
 Gly Gly Leu Pro Cys Val Gly Asp Ala Ala Glu Tyr Gln Asp Cys Asn
 980 985 990
 Pro Gln Ala Cys Pro Val Arg Gly Ala Trp Ser Cys Trp Thr Ser Trp
 995 1000 1005
 Ser Pro Cys Ser Ala Ser Cys Gly Gly Gly His Tyr Gln Arg Thr
 1010 1015 1020
 Arg Ser Cys Thr Ser Pro Ala Pro Ser Pro Gly Glu Asp Ile Cys
 1025 1030 1035
 Leu Gly Leu His Thr Glu Glu Ala Leu Cys Ala Thr Gln Ala Cys
 1040 1045 1050
 Pro Glu Gly Trp Ser Pro Trp Ser Glu Trp Ser Lys Cys Thr Asp
 1055 1060 1065
 Asp Gly Ala Gln Ser Arg Ser Arg His Cys Glu Glu Leu Leu Pro
 1070 1075 1080
 Gly Ser Ser Ala Cys Ala Gly Asn Ser Ser Gln Ser Arg Pro Cys
 1085 1090 1095
 Pro Tyr Ser Glu Ile Arg Val Ile Leu Pro Ala Ser Ser Met Glu
 1100 1105 1110
 Glu Ala Thr Asp Cys Ala Gly Phe Asn Leu Ile His Leu Val Ala
 1115 1120 1125
 Thr Gly Ile Ser Cys Phe Leu Gly Ser Gly Leu Leu Thr Leu Ala
 1130 1135 1140
 Val Tyr Leu Ser Cys Gln His Cys Gln Arg Gln Ser Gln Glu Ser
 1145 1150 1155
 Thr Leu Val His Pro Ala Thr Pro Asn His Leu His Tyr Lys Gly
 1160 1165 1170
 Gly Gly Thr Pro Lys Asn Glu Lys Tyr Thr Pro Met Glu Phe Lys

1175		1180		1185
Thr Leu Asn Lys Asn Asn	Leu Ile Pro Asp Asp Arg	Ala Asn Phe		
1190	1195	1200		
Tyr Pro Leu Gln Gln Thr	Asn Val Tyr Thr Thr Thr	Tyr Tyr Pro		
1205	1210	1215		
Ser Pro Leu Asn Lys His	Ser Phe Arg Pro Glu Ala	Ser Pro Gly		
1220	1225	1230		
Gln Arg Cys Phe Pro Asn	Ser			
1235	1240			

<210> 27
 <211> 4567
 <212> DNA
 <213> Homo sapiens

<400> 27

gcggccgcgcc	cattcccaga	ccggccgcga	gcccatctgg	ttagctcccg	ccgctccgcg	60
ccgcccggga	gtcgggagcc	gcggggaacc	gggcacctgc	acccgcctct	gggagtgagt	120
ggttccagct	ggtgcctggc	ctgtgtctct	tggatgccct	gtggcttcag	tccgtctcct	180
gttgcaccac	acctcgtccc	tgggcccgcct	gataccccag	cccaacagct	aagggtgtgga	240
tggacagtag	ggggttggt	tctctcactg	gtcaggggtc	ttctcccctg	tctgcctccc	300
ggagctagga	ctgcagaggg	gcctatcatg	gtgcttgcat	gccccctggc	tgtctcgctg	360
ttgctgcccc	gcctcacact	gctggtgtcc	cacctctcca	gctcccagga	tgtctccagt	420
gagcccagca	gtgagcagca	gctgtgcgcc	cttagcaagc	acccacacct	ggcctttgaa	480
gacctgcagc	cgtgggtctc	taacttcacc	tacctggag	cccgggattt	ctcccagctg	540
gctttggacc	cctccgggaa	ccagctcacc	gtgggagcca	ggaactacct	cttcagactc	600
agccttgcca	atgtctctct	tcttcaggcc	acagagtggg	cctccagtga	ggacacgcgc	660
cgctcctgcc	aaagcaaagg	gaagactgag	gaggagtgtc	agaactacct	gcgagtcctg	720
atcgctcgcc	gccggaaggt	gttcatgtgt	ggaaccaatg	ccttttcccc	catgtgcacc	780
agcagacagg	tggggaacct	cagccggact	actgagaaga	tcaatggtgt	ggcccgtgc	840
ccctatgacc	cacgccacaa	ctccacagct	gtcatctcct	cccaggggga	gctctatgca	900
gccacggtca	tcgacttctc	aggtcgggac	cctgccatct	accgcagcct	gggcagtggg	960
ccaccgcttc	gcactgcccc	atataactcc	aagtggctta	atgagccaaa	cttcgtggca	1020
gcctatgata	ttgggctgtt	tgcatacttc	ttcctgcggg	agaacgcagt	ggagcacgac	1080
tgtggacgca	ccgtgtactc	tcgctgggcc	cgctgtgcca	agaatgacgt	ggggggccga	1140
ttcctgctgg	aggacacatg	gaccacatcc	atgaaggccc	ggctcaactg	ctcccgcgcg	1200
ggcgaggtcc	ccttctacta	taacgagctg	cagagtgcct	tccacttgcc	agagcaggac	1260
ctcatctatg	gagttttcac	aaccaacgta	aacagcatcg	cggttctctg	tgtctgcgcc	1320
ttcaacctca	gtgctatctc	ccaggctttc	aatggcccat	ttcgctacca	ggagaacccc	1380
agggctgcct	ggctccocat	agccaacccc	atccccaatt	tccagtgtgg	caccctgcct	1440
gagaccggtc	ccaacgagaa	cctgacggag	cgcagcctgc	aggacgcgca	gcgcctcttc	1500
ctgatgagcg	aggccgtgca	gccggtgaca	cccgagccct	gtgtcaccca	ggacagcgtg	1560
cgcttctcac	acctcgtggt	ggacctggtg	caggctaaag	acacgctcta	ccatgtactc	1620
tacattggca	ccgagtcggg	caccatcctg	aaggcgtgt	ccacggcgag	ccgcagcctc	1680
cacggctgct	acctggagga	gctgcacgtg	ctgccccccg	ggcgccgcga	gcccctgcgc	1740
agcctgcgca	tcctgcacag	cgcccgcgcg	ctcttcgtgg	ggctgagaga	cggcgtcctg	1800
cgggtcccac	tggagaggtg	cgccgcctac	cgcagccagg	gggcatgcct	gggggcccgg	1860
gacctgtact	gtggctggga	cgggaagcag	caacgttgca	gcacactcga	ggacagctcc	1920
aacatgagcc	tctggaccca	gaacatcacc	gcctgtcctg	tgcggaatgt	gacacgggat	1980
gggggcttcg	gcccattggtc	accatggcaa	ccatgtgagc	acttgatggg	ggacaactca	2040
ggctcttgcc	tgtgtcgagc	tcgatcctgt	gattcccctc	gaccccgctg	tgggggcctt	2100
gagtcctggt	ggcagcccat	ccacatgcgc	aactgtccca	ggaatggggc	gtggaccccc	2160
tggtcatcgt	gggcgctgtg	cagcacgtcc	tgtggcatcg	gcttccaggt	ccgcacgcga	2220
agttgcagca	accctgctcc	ccgccacggg	ggccgcatct	gcgtgggcaa	gagccgggag	2280
gaacggttct	gtaatgagaa	cacgccttgc	ccggtgccca	tcttctgggc	ttcctggggc	2340
tcctggagca	agtgcagcag	caactgtgga	gggggcatgc	agtcgcggcg	tcgggcctgc	2400

gagaacggca	actcctgcct	gggctgcggc	gtggagttca	agacgtgcaa	ccccgagggc	2460
tgccccgaag	tgcggcgcaa	caccccctgg	acgccgtggc	tgcccgtgaa	cgtgacgcag	2520
ggcggggcac	ggcaggagca	gcggttccgc	ttcacctgcc	gcgcgcccct	tgacagaccg	2580
cacggcctgc	agttcggcag	gagaaggacc	gagacgagga	cctgtcccgc	ggacggctcc	2640
ggctcctgcg	acaccgacgc	cctggtggag	gtcctcctgc	gcagcgggag	cacctccccg	2700
cacacggtga	gcgggggctg	ggcgcctgg	ggcccgtggt	cgtcctgctc	ccgggactgc	2760
gagctgggct	tccgcgtccg	caagagaacg	tgactaacc	cggagccccg	caacgggggc	2820
ctgccctgcg	tgggcgatgc	tgccgagtac	caggactgca	acccccaggc	ttgcccagtt	2880
cggggtgctt	ggtcctgctg	gacctcatgg	tctccatgct	cagcttcctg	tgggtgggggt	2940
cactatcaac	gcacccgttc	ctgcaccagc	cccgaccctt	ccccagggtga	ggacatctgt	3000
ctcgggctgc	acacggagga	ggcactatgt	gccacacagg	cctgcccaga	aggctggtcg	3060
ccctgggtctg	agtggagtaa	gtgcaactgac	gacggagccc	agagccgaag	ccggcactgt	3120
gaggagctcc	tcccagggtc	cagcgcmtgt	gctggaaaca	gcagccagag	ccgccccctgc	3180
ccctacacgcg	agattcscgt	catcctgcca	gcctccagca	tggaggaggc	caccgactgt	3240
gcagggttca	atctcatcca	cttggtggcc	acgggcatct	cctgcttctt	gggctctggg	3300
ctcctgaccc	tagcagtgtg	cctgtcttgc	cagcaactgcc	agcgtcagtc	ccaggagtcc	3360
acactgggtcc	atcctgccac	ccccaaccat	ttgcaactaca	agggcgagg	cacccccgaag	3420
aatgaaaagt	acacacccat	ggaattcaag	accctgaaca	agaataactt	gatccctgat	3480
gacagagcca	acttctaccc	attgcagcag	accaatgtgt	acacgactac	ttactacca	3540
agccccctga	acaaacacag	cttccggccc	gaggcctcac	ctggacaacg	gtgcttcccc	3600
aacagctgat	accgccgtcc	tggggacttg	ggcttcttgc	cttcataagg	cacagagcag	3660
atggagatgg	gacagtggag	ccagtttggg	tttctccctc	tgcaactaggc	caagaacttg	3720
ctgccttgcc	tgtggggggg	cccataccggc	ttcagagagc	tctggctggc	attgaccatg	3780
ggggaaaagg	ctggtttcag	gctgacatat	ggccgcagg	ccagttcagc	ccaggtctmt	3840
catggttatc	ttccaaccca	ctgtcacgct	gacactatgc	tgccatgcct	gggctgtgga	3900
cctactgggc	atltgaggaa	ytggagaatg	gagatggcaa	gagggcaggc	ttttaagttt	3960
gggttgagg	caacttctctg	tggccccccac	aagctgagtc	tggccttctc	cagctggccc	4020
caaaaaaggc	ctttgctaca	tcctgattat	ctctgaaagt	aatcaatcaa	gtggctccag	4080
tagctctgga	ttttctgcca	gggctggggc	attgtggtgc	tgccccagta	tgacatggga	4140
ccaaggccag	cgcaggttat	ccacctctgc	ctggaagtct	atactctacc	cagggcatcc	4200
ctctggtcag	aggcagttag	tactgggaac	tggaggctga	cctgtgctta	gaagtccttt	4260
aatctgggct	ggtacaggcc	tcagccttgc	cctcaatgca	cgaaagggtg	cccaggagag	4320
aggatcaatg	ccataggagg	cagaagtctg	gcctctgtgc	ctctatggag	actatcttcc	4380
agttgctgct	caacagagtt	gttggctgag	acctgcttgg	gagtctctgc	tggcccttca	4440
tctgttcagg	aacacacaca	cacacacact	cacacacgca	cacacaatca	caatttgcta	4500
cagcaacaaa	aaagacattg	ggctgtggca	ttattaatta	aagatgatat	ccagtcaaaa	4560
aaaaact						4567

<210> 28
 <211> 453
 <212> DNA
 <213> Homo sapiens

<400> 28	
agtaatcagc	tcgggtaccgg
aagtctatac	tctacccagg
ggctgacctg	tgcttagaag
aatgcacgaa	aggtggccca
ctgtgcctct	atggagacta
gcttgggagt	ctctgctggc
cacgcacaca	caatcacaat
taattaaaga	tgatatccag
catgtgctgt	agccagcgca
gcatccctct	ggtcagaggc
tcctttaatc	tgggctggta
ggagagagga	tcaatgccat
tcttccagtt	gctgctcaac
ccttcactctg	ttcaggaaca
ttgctacagc	aacaaaaaag
tcaaaaaaaa	act
ggttatccac	ctctgcctgg
agtgagtact	gggaactgga
caggcctcag	ccttgccctc
aggaggcaga	agtctggcct
agagttgttg	gctgagacct
cacacacaca	cacactcaca
acattggggt	gtggcattat
	60
	120
	180
	240
	300
	360
	420
	453

<210> 29
 <211> 4675
 <212> DNA
 <213> Homo sapiens

<400> 29

gcggccgccc	cattcccaga	ccggccgcca	gcccattctgg	ttagctcccg	ccgctccgcg	60
ccgcccggga	gtcgggagcc	gcggggaacc	gggcacctgc	acccgcctct	gggagtgagt	120
ggttccagct	ggtgcctggc	ctgtgtctct	tggatgccct	gtggcttcag	tccgtctcct	180
gttgcaccac	acctcgcccc	tgggcccgcct	gatacccccag	cccaacagct	aaggtgtgga	240
tggacagtag	ggggctggct	tctctcactg	gtcaggggca	ggaagccaag	tggagacttt	300
gaatggaggc	aaggatggag	gggacctggg	gaagaggact	ggcctgaatc	accttcccca	360
aaggtcctca	tggactgagc	tggaggtctt	ctccccctgc	tgcctcccgg	agctaggact	420
gcagagggggc	ctatcatggt	gcttgcaggc	cccctggctg	tctcgtgtt	gctgcccagc	480
ctcacactgc	tgggtgtccca	cctctccagc	tcccaggatg	tctccagtga	gcccagcagt	540
gagcagcagc	tgtgcgcctt	tagcaagcac	cccacctggg	cctttgaaga	cctgcagccg	600
tgggtctcta	acttcaccta	ccctggagcc	cgggatttct	cccagctggc	tttggacccc	660
tccgggaacc	agctcatcgt	gggagccagg	aactacctct	tcagactcag	ccttgccaat	720
gtctctcttc	ttcaggccac	agagtggggc	tccagtggag	acacgcgcg	ctcctgccaa	780
agcaaaggga	agactgagga	ggagtgtcag	aactacgtgc	gagtcctgat	cgtcgccggc	840
cgggaaggtg	tcatgtgtgg	aaccaatgcc	ttttcccca	tgtgcaccag	cagacaggtg	900
gggaacctca	ccggactac	tgagaagatc	aatggtgtgg	cccgtgccc	ctatgacca	960
cgccacaact	ccacagctgt	catctcctcc	cagggggagc	tctatgcagc	cacggtcatc	1020
gacttctcag	gtcgggaccc	tgccatctac	cgcagcctgg	gcagtggggc	accgcttcgc	1080
actgccaat	ataactccaa	gtggcttaat	gagccaaact	tcgtggcagc	ctatgatatt	1140
gggctgtttg	catacttctt	cctgcgggag	aacgcagtgg	agcacgactg	tggacgcacc	1200
gtgtactctc	gcgtggcccc	cgtgtgcaag	aatgacgtgg	ggggccgatt	cctgctggag	1260
gacacatgga	ccacattcat	gaaggccccg	ctcaactgct	cccgcccggg	cgaggtcccc	1320
ttctactata	acgagctgca	gagtgccttc	cacttgccag	agcaggacct	catctatgga	1380
gttttcacaa	ccaacgtaaa	cagcatgcgc	gcttctgctg	tctgcgcctt	caacctcagt	1440
gctatctccc	aggctttcaa	tggcccattt	cgctaccagg	agaaccccag	ggctgcctgg	1500
ctccccatag	ccaaccccat	ccccaatctt	cagtgtggca	ccctgcctga	gaccggtccc	1560
aacgagaacc	tgacggagcg	cagcctgcag	gacgcgcagc	gcctcttcct	gatgagcgag	1620
gccgtgcagc	cggtgacacc	cgagccctgt	gtcaccacag	acagcgtgcg	cttctcacac	1680
ctcgtggtgg	acctggtgca	ggctaaagac	acgctctacc	atgtactcta	cattggcacc	1740
gagtcgggca	ccatcctgaa	ggcgtgtgcc	acggcgagcc	gcagcctcca	cggctgctac	1800
ctggaggagc	tgcacgtgct	gccccccggg	cgccgcgagc	ccctgcgcag	cctgcgcate	1860
ctgcacagcg	cccgcgcgct	cttcgtgggg	ctgagagacg	gcgtcctgcg	ggctcccactg	1920
gtagagtgcg	ccgcctaccg	cagccagggg	gcactgcctg	gggcccggga	cccgtactgt	1980
ggctgggacg	ggaagcagca	acgttgacgc	acactcgagg	acagctccaa	catgagcctc	2040
tggaccagga	acatcacccg	ctgtcctgtg	cggaatgtga	cacgggatgg	gggcttcggc	2100
ccatggtcac	catggcaacc	atgtgagcac	ttggatgggg	acaactcagg	ctcttgcttg	2160
tgtcagagtc	gatcctgtga	ttcccctcga	ccccgctgtg	ggggccttga	ctgcctgggg	2220
ccagccatcc	acatcgccaa	ctgctccagg	aatggggcgt	ggaccccgtg	gtcatcgtgg	2280
gcgctgtgca	gcacgtcctg	tggcatcggc	ttccaggtcc	gccagcgaag	ttgcagcaac	2340
cctgctcccc	gccacggggg	ccgcatctgc	gtgggcaaga	gccgggagga	acggttctgt	2400
aatgagaaca	cgccttgccc	ggtgcccatc	ttctgggctt	cctggggctc	ctggagcaag	2460
tgcagcagca	actgtggagg	gggcatgcag	tgcggcgctc	gggcctgcga	gaacggcaac	2520
tcctgcctgg	gctgcggcgt	ggagttcaag	acgtgcaacc	ccgagggctg	ccccgaagtg	2580
cggcgcaaca	ccccctggac	gccgtggctg	cccgtgaacg	tgacgcaggg	cggggcacgg	2640
caggagcagc	ggttccgctt	cacctgccgc	gcgccccttg	cagacccgca	cggcctgcag	2700
ttcggcagga	gaaggaccga	gacgaggacc	tgtcccgcgg	acggctccgg	ctcctgcgac	2760
accgacgccc	tgggtggaggt	cctcctgcgc	agcgggagca	cctccccgca	cacgggtgagc	2820
gggggctggg	ccgcctgggg	cccgtggtcg	tcctgctccc	gggactgcga	gctgggcttc	2880
cgcgtccgca	agagaacgtg	cactaaccgc	gagccccgca	acgggggcct	gccctgcgtg	2940
ggcgatgctg	ccagtagcca	ggactgcaac	ccccaggctt	gcccagttcg	gggtgcttgg	3000
tcctgtctga	cctcatggtc	tccatgctca	gcttccctgt	gtgggggtca	ctatcaacgc	3060
acccgttcc	gcaccagccc	cgcaccctcc	ccaggtgagg	acatctgtct	cgggctgcac	3120
acggaggagg	cactatgtgc	cacacaggcc	tgcccagaag	gctggtcgcc	ctggtctgag	3180
tggagtaagt	gcaactgacga	cggagcccag	agccgaagcc	ggcactgtga	ggagctcctc	3240
ccagggtcca	gcgcmgtg	tggaaacagc	agccagagcc	gcccctgccc	ctacagcgag	3300
attcscgtca	tcctgccagc	ctccagcatg	gaggaggcca	ccgactgtgc	agggttcaat	3360
ctcatccact	tgggtggccac	gggcatctcc	tgcttcttgg	gctctgggct	cctgacccta	3420
gcagtgtacc	tgtcttgcca	gcactgccag	cgctagctcc	aggagtccac	actggtccat	3480
cctgccaccc	ccaaccattt	gcactacaag	ggcggaggca	ccccgaagaa	tgaaaagtac	3540
acacccatgg	aattcaagac	cctgaacaag	aataacttga	tccttgatga	cagagccaac	3600
ttctacccat	tgcagcagac	caatgtgtac	acgactactt	actaccaag	ccccctgaac	3660

aaacacagct	tccggccccga	ggcctcacct	ggacaacggt	gcttccccaa	cagctgatac	3720
cgcgcgtcctg	gggacttggg	cttcttgccct	tcataaggca	cagagcagat	ggagatggga	3780
cagtggagcc	agtttggttt	tctccctctg	cactaggcca	agaacttgct	gccttgccctg	3840
tgggggggtcc	catccggctt	cagagagctc	tggtggcat	tgaccatggg	ggaaagggt	3900
ggtttcaggc	tgacatatgg	ccgcaggtcc	agttcagccc	aggtctmtca	tggttatctt	3960
ccaacccact	gtcacgctga	cactatgctg	ccatgcctgg	gctgtggacc	tactgggcat	4020
ttgaggaayt	ggagaatgga	gatggcaaga	gggcaggctt	ttaagtttg	gttgagaca	4080
acttcctgtg	gccccacaa	gctgagtctg	gccttctcca	gctggcccca	aaaaaggcct	4140
ttgctacatc	ctgattatct	ctgaaagtaa	tcaatcaagt	ggctccagta	gctctggatt	4200
ttctgccagg	gctgggccat	tgtggtgctg	ccccagtatg	acatgggacc	aaggccagcg	4260
caggttatcc	acctctgcct	ggaagtctat	actctaccca	gggcatccct	ctggtcagag	4320
gcagtgaagta	ctgggaactg	gaggctgacc	tgtgcttaga	agtccttta	tctgggctgg	4380
tacaggcctc	agccttgccc	tcaatgcacg	aaaggtggcc	caggagagag	gatcaatgcc	4440
ataggaggca	gaagtctggc	ctctgtgcct	ctatggagac	tatcttccag	ttgctgctca	4500
acagagttgt	tggctgagac	ctgcttgagg	gtctctgctg	gcccttcatc	tggtcaggaa	4560
cacacacaca	cacacactca	cacacgcaca	cacaatcaca	atttgcata	gcaacaaaaa	4620
agacattggg	ctgtggcatt	attaattaaa	gatgatatac	agtcaaaaaa	aaact	4675

<210> 30

<211> 4731

<212> DNA

<213> Homo sapiens

<400> 30

attggagatg	ctcgggggca	ggctgcgcg	ttgtgtcctg	cttttctg	gccagaccaa	60
gccgtctgga	gctgctggtc	aggttttctt	gctgacctca	cctgaccaca	gtggcctggg	120
tggactctac	agggaaatgt	tgttttctcc	ctgggagcag	tagcagcagt	cctggctccc	180
ctggactgag	aactcctcat	cagccccagg	aagcccgac	ccccttccag	ggatctggaa	240
ccggtgtgcc	tgtggcccca	ggtctgctcc	caggcgtggg	ctgaagtcct	gacttctgtc	300
gctgggggca	aggagtggga	gagcccagct	gctgcctggg	ctttggcaga	cagcaggctg	360
atggtgctgg	cttccccgag	actgcttctc	ctgcctgctg	tctgatttcc	ctgcatgggtg	420
ccgcgagctg	agctgctacg	ggtcttctcc	cctgtctgcc	tcccggagct	aggactgcag	480
aggggcctat	catggtgctt	gcaggccccc	tggctgtctc	gctgttgctg	cccagcctca	540
cactgctggg	gtcccacctc	tccagctccc	aggatgtctc	cagtgcagcc	agcagtgagc	600
agcagctgtg	cgcccttagc	aagcacccca	ccgtggcctt	tgaagacctg	cagccgtggg	660
tctctaactt	cacctacctt	ggagcccggg	atttctccca	gctggctttg	gacccctccg	720
ggaaccagct	catcgtggga	gccaggaact	acctcttcag	actcagcctt	gccaatgtct	780
ctcttcttca	ggccacagag	tgggcctcca	gtgaggacac	gcgccgctcc	tgccaaagca	840
aaagggaagac	tgaggaggag	tgtcagaact	acgtgcgagt	cctgatcgctc	gccggccgga	900
aggtgttcat	gtgtggaacc	aatgcctttt	cccccatgtg	caccagcaga	cagggtgggga	960
acctcagccg	gactactgag	aagatcaatg	gtgtggcccc	ctgcccttat	gacccacgcc	1020
acaactccac	agctgtcatc	tcctcccagg	gggagctcta	tgcagccacg	gtcatcgact	1080
tctcaggtcg	ggaccctgcc	atctaccgca	gcctgggcag	tgggccaccg	cttcgcactg	1140
cccaatataa	ctccaagtgg	cttaatgagc	caaacttcgt	ggcagcctat	gatattgggc	1200
tgtttgcata	cttcttctctg	cgggagaacg	cagtggagca	cgactgtgga	cgcaccgtgt	1260
actctcgcgt	ggcccgcgtg	tgcaagaatg	acgtgggggg	ccgatttctg	ctggaggaca	1320
catggaccac	attcatgaag	gcccggctca	actgtctccg	cccgggcgag	gtccccttct	1380
actataacga	gctgcagagt	gccttccact	tgccagagca	ggacctcatc	tatggagtgt	1440
tcacaaccaa	cgtaaacagc	atcgcggtt	ctgctgtctg	cgccttcaac	ctcagtgtcta	1500
tctcccaggc	tttcaatggc	ccatttctgt	accaggagaa	ccccagggt	gcctggctcc	1560
ccatagccaa	ccccatcccc	aatttccagt	gtggcaccct	gcctgagacc	ggtcccaacg	1620
agaacctgac	ggagcgcagc	ctgcaggacg	cgcagcgcct	cttctgatg	agcgaggccg	1680
tgcagccggt	gacaccgcag	ccctgtgtca	cccaggacag	cgtgcgcttc	tcacacctcg	1740
tgggtggacct	ggtgcaggct	aaagacacgc	tctaccatgt	actctacatt	ggcaccgagt	1800
cgggcaccat	cctgaaggcg	ctgtccacgg	cgagccgcag	cctccacggc	tgctacctgg	1860
aggagctgca	cgtgctgccc	cccgggcgcc	gcgagccctc	gcgcagcctg	cgcactctgc	1920
acagcgcccg	cgcgctcttc	gtggggctga	gagacggcgt	cctgcgggtc	ccactggaga	1980
ggtgcgccc	ctaccgcagc	cagggggcat	gcctgggggc	ccgggacccg	tactgtggct	2040
gggacgggaa	gcagcaacgt	tgcagcacac	tcgaggacag	ctccaacatg	agcctctgga	2100
cccagaacat	caccgcctgt	cctgtgcgga	atgtgacacg	ggatgggggc	ttcggcccat	2160

ggtcaccatg	gcaaccatgt	gagcacttgg	atggggacaa	ctcaggctct	tgcctgtgtc	2220
gagctcgatc	ctgtgattcc	cctcgacccc	gctgtggggg	ccttgactgc	ctggggccag	2280
ccatccacat	cgccaactgc	tccaggaatg	ggcggtggac	cccgtggtca	tcgtggggcg	2340
tgtgcagcac	gtcctgtggc	atcggtctcc	aggtccgcc	gcgaagtgtc	agcaaccctg	2400
ctccccgcca	cgggggccgc	atctgcgtgg	gcaagagccg	ggaggaacgg	ttctgtaatg	2460
agaacacgcc	ttgcccgggtg	cccatcttct	gggtctcctg	gggtcctgg	agcaagtga	2520
gcagcaactg	tggagggggc	atgcagtcgc	ggcgctgggc	ctgcgagaac	ggcaactcct	2580
gcctgggctg	cggcgtggag	ttcaagacgt	gcaacccga	gggctgcccc	gaagtgcggc	2640
gcaacacccc	ctggacgccg	tggctgcccg	tgaacgtgac	gcagggcggg	gcacggcagg	2700
agcagcggtt	ccgcttcacc	tgccgcgcgc	cccttgacga	cccgcacggc	ctgcagttcg	2760
gcaggagaag	gaccgagacg	aggacctgtc	ccgcggacgg	ctccggctcc	tgcgacaccg	2820
acgccctggt	ggaggtcctc	ctgcgcagcg	ggagcacctc	cccgcacacg	gtgagcgggg	2880
gctgggcccgc	ctggggccccg	tggctcgtcct	gctcccggga	ctgcgagctg	ggcttccgcg	2940
tccgcaagag	aacgtgcact	aacccggagc	cccgaacggg	gggcctgccc	tgcgtggggc	3000
atgctgccga	gtaccaggac	tgaaccccc	aggcttgccc	agttcggggt	gcttggctct	3060
gctggagcctc	atggtctcca	tgtctagctt	cctgtgggtg	gggtcactat	caacgcaccc	3120
gttccctgcac	cagccccgca	ccctccccag	gtgaggacat	ctgtctcggg	ctgcacacgg	3180
aggaggcact	atgtgccaca	caggcctgcc	cagaaggctg	gtcgccctgg	tctgagtga	3240
gtaagtgcac	tgacgacgga	gcccagagcc	gaagccggca	ctgtgaggag	ctcctcccag	3300
ggtccagcgc	mtgtgctgga	aacagcagcc	agagccggcc	ctgcccctac	agcgagattc	3360
scgtcatcct	gccagcctcc	agcatggagg	aggccaccga	ctgtgcaggg	ttcaatctca	3420
tccacttgggt	ggccacgggc	atctcctgct	tcttgggctc	tgggtcctcg	accctagcag	3480
tgtacctgtc	tggcagcac	tgccagcgte	agtcacacga	gtccacactg	gtccatctcg	3540
ccacccccaa	ccatttgac	tacaagggcg	gaggcacccc	gaagaatgaa	aagtaacac	3600
ccatggaatt	caagaccctg	aacaagaata	acttgatccc	tgatgacaga	gccaacttct	3660
acccattgca	gcagaccaat	gtgtacacga	ctacttacta	cccaagcccc	ctgaacaaac	3720
acagcttccg	gcccagggcc	tcacctggac	aacggtgctt	ccccaacagc	tgataccgcc	3780
gtcctgggga	cttgggcttc	ttgccttcat	aaggcacaga	gcagatggag	atgggacagt	3840
ggagccagtt	tggttttctc	cctctgcact	aggccaagaa	cttgctgcct	tgcctgtggg	3900
gggtcccatc	cggcttcaga	gagctctggc	tggcattgac	catgggggaa	agggtctggt	3960
tcaggctgac	atatggccgc	aggctccagt	cagcccaggt	ctmtcatggt	tatcttccaa	4020
cccactgtca	cgctgacact	atgctgccat	gcctgggctg	tggacctact	gggcatttga	4080
ggaaytgag	aatggagatg	gcaagagggc	aggcttttaa	gtttgggttg	gagacaactt	4140
cctgtggccc	ccacaagctg	agtctggcct	tctccagctg	gccccaaaaa	aggcctttgc	4200
tacatcctga	ttatctctga	aagtaatcaa	tcaagtggct	ccagtagctc	tggattttct	4260
gccagggtg	ggccattgtg	gtgctgcccc	agtatgacat	gggaccaagg	ccagcgcagg	4320
ttatccacct	ctgcctggaa	gtctatactc	taccagggc	atccctctgg	tcagaggcag	4380
tgagtactgg	gaactggagg	ctgacctgtg	cttagaagtc	ctttaatctg	ggctggtaca	4440
ggcctcagcc	ttgccctcaa	tgcacgaaag	gtggcccagg	agagaggatc	aatgccatag	4500
gaggcagaag	tctggcctct	gtgcctctat	ggagactatc	ttccagttgc	tgctcaacag	4560
agttgtttgc	tgagactgtc	ttgggagctc	ctgtgggccc	ttcatctgtt	caggaacaca	4620
cacacacaca	catcacaca	cgcacacaca	atcacattt	gctacagcaa	caaaaaagac	4680
attgggctgt	ggcattatta	attaaagatg	atatccagtc	aaaaaaaaac	t	4731

<210> 31

<211> 4703

<212> DNA

<213> Homo sapiens

<400> 31

gcgcccgccc	cattcccaga	ccggccgcca	gcccactctg	ttagctcccg	ccgtccgcg	60
ccgcccggga	gtcgggagcc	gcggggaacc	gggcacctgc	acccgcctct	gggagccagc	120
ttgggtcccg	gttgactgg	gccctgccag	ggctgtggtc	ggcgcatctg	ggctgcagcg	180
gcgatgggga	cccgggaccc	aggcctggag	aaggagacgg	acgagtggag	ctgagggacg	240
gagggacaga	gtgagtgggt	ccagctgggt	cctggcctgt	gtctcttgga	tgcctgtgg	300
cttcagtcog	tctcctgttg	cccaccacct	cgctcctggg	ccgcctgata	ccccagccca	360
acagctaagg	tgtggatgga	cagtaggggg	ctggcttctc	tcactgggtc	ggggtcttct	420
ccctgtctg	cctcccgag	ctaggactgc	agaggggcct	atcatgggtc	ttgcaggccc	480
cctggctgtc	tcgctgttgc	tgcccagcct	cacactgctg	gtgtcccacc	tctccagctc	540
ccaggatgtc	tccagtggag	ccagcagtga	gcagcagctg	tgcgccctta	gcaagcacc	600

caccgtggcc	tttgaagacc	tgcagccgtg	ggtctctaac	ttcacctacc	ctggagcccg	660
ggattttctcc	cagctggctt	tggaccacctc	cggaaccag	ctcatcgtgg	gagccaggaa	720
ctacctcttc	agactcagcc	ttgccaatgt	ctctcttctt	caggccacag	agtgggcctc	780
cagtgaggac	acgcgccgct	cctgccaaag	caaagggaag	actgaggagg	agtgtcagaa	840
ctacgtgcga	gtcctgatcg	tcgccggccg	gaaggtgttc	atgtgtggaa	ccaatgcctt	900
ttcccccatg	tgcaccagca	gacaggtggg	gaacctcagc	cggactactg	agaagatcaa	960
tgggtgtggcc	cgctgcccct	atgaccacag	ccacaactcc	acagctgtca	tctcctccca	1020
gggggagctc	tatgcagcca	cggtcatcga	cttctcaggt	cgggaccctg	ccatctaccg	1080
cagcctgggc	agtggggccac	cgcttcgcac	tgcccaatat	aactccaagt	ggcttaatga	1140
gccaaacttc	gtggcagcct	atgatattgg	gctgtttgca	tacttcttcc	tgcgggagaa	1200
cgcagtggag	cacgactgtg	gacgcaccgt	gtactctcgc	gtggcccgcg	tgtgcaagaa	1260
tgacgtgggg	ggccgattcc	tgctggagga	cacatggacc	acattcatga	aggcccggct	1320
caactgctcc	cgcccggggc	aggtcccctt	ctactataac	gagctgcaga	gtgccttcca	1380
cttgccagag	caggacctca	tctatggagt	tttcacaacc	aacgtaaaca	gcatcgcggc	1440
ttctgctgtc	tgcgccttca	acctcagtcg	tatctcccag	gctttcaatg	gccatttctg	1500
ctaccaggag	aaccccaggg	ctgcctggct	ccccatagcc	aaccccatcc	ccaatttcca	1560
gtgtggcacc	ctgcctgaga	ccggtcccaa	cgagaacctg	acggagcgca	gcctgcagga	1620
cgcgcagcgc	ctcttctctga	tgagcgaggc	cgtgcagccg	gtgacacccg	agccctgtgt	1680
cacccaggac	agcgtgcgct	tctcacacct	cgtggtggac	ctggtgcagg	ctaaagacac	1740
gctctaccat	gtactctaca	ttggcaccga	gtcgggcacc	atcctgaagg	cgctgtccac	1800
ggcgagccgc	agcctccacg	gctgctacct	ggaggagctg	cacgtgctgc	cccccgggcg	1860
ccgcgagccc	ctgcgcagcc	tgcgcatacct	gcacagcgcc	cgcgcgctct	tcgtggggct	1920
gagagacggc	gtcctgcggg	tcccactgga	gaggtgcgcc	gcctaccgca	gccagggggc	1980
atgcctgggg	gcccgggacc	cgtactgtgg	ctgggacggg	aagcagcaac	gttgacgac	2040
actcgaggac	agctccaaca	tgagcctctg	gaccacagaag	atcacccgct	gtcctgtgcg	2100
gaatgtgaca	cgggatgggg	gcttcggccc	atggtcacca	tggcaaccat	gtgagcactt	2160
ggatggggac	aactcaggct	cttgctgtg	tcgagctcga	tcctgtgatt	cccctcgacc	2220
ccgctgtggg	ggccttgact	gcctggggcc	agccatccac	atcgccaact	gctccaggaa	2280
tggggcgtgg	accccgtggt	catcgtgggc	gctgtgcagc	acgtcctgtg	gcatcggtt	2340
ccaggtccgc	cagcgaagtt	gcagcaaccc	tgctccccgc	cacggggggc	gcatctgcgt	2400
gggcaagagc	cgaggaggaac	ggttctgtaa	tgagaacacg	ccttgcccgg	tgcccatctt	2460
ctgggcttcc	tggggctcct	ggagcaagtg	cagcagcaac	tgtggagggg	gcatgcaagtc	2520
gcggcgtcgg	gcctgcgaga	acggcaactc	ctgcctgggc	tgccgctgtg	agttcaagac	2580
gtgcaacccc	gagggtgccc	ccgaagtgcg	gcgcaacacc	ccctggacgc	cgtggctgcc	2640
cgtgaacgtg	acgcagggcg	gggcacggca	ggagcagcgg	ttccgcttca	cctgcgcgcg	2700
gccccttgca	gaccgcacag	gcctgcagtt	cggcaggaga	aggaccgaga	cgaggacctg	2760
tcccgcggac	ggctccggct	cctgcgacac	cgacgccctg	gtggaggtcc	tcctgcgcag	2820
cgggagcacc	tcccgcacaa	cgggtgagcgg	gggctggggc	gcctggggcc	cgtggctcgtc	2880
ctgctcccgg	gactgcgagc	tgggcttccg	cgtccgcaag	agaacgtgca	ctaaccggga	2940
gccccgcaac	gggggcctgc	cctgcgtggg	cgatgctgcc	gagtaccagg	actgcaaccc	3000
ccaggcttgc	ccagttcggg	gtgcttggtc	ctgctggacc	tcattggtctc	catgctcagc	3060
ttcctgtggt	gggggtcact	atcaacgcac	ccgttctctg	accagccccg	caccctcccc	3120
aggtgaggac	atctgtctcg	ggctgcacac	ggaggaggca	ctatgtgcca	cacaggcctg	3180
cccagaaggc	tggctgcctt	ggtctgagtg	gagtaagtgc	actgacgacg	gagcccagag	3240
ccgaagccgg	cactgtgagg	agctcctccc	agggtccagc	gcmtgtgctg	gaaacagcag	3300
ccagagccgc	ccctgcccct	acagcgagat	tcscgtcatc	ctgccagcct	ccagcatgga	3360
ggaggccacc	gactgtgcag	ggttcaatct	catccacttg	gtggccacgg	gcatctcctg	3420
cttcttgggc	tctgggctcc	tgaccctagc	agtgtacctg	tcttgccagc	actgccagcg	3480
tcagtcccag	gagtccacac	tgggtccatcc	tggcaccccc	aaccatttgc	actacaaggg	3540
cggaggccacc	ccgaagaatg	aaaagtacac	acctatggaa	ttcaagacct	tgaacaagaa	3600
taacttgatc	cctgatgaca	gagccaactt	ctacccattg	cagcagacca	atgtgtacac	3660
gactacttac	tacccaagcc	ccctgaacaa	acacagcttc	cgggccgagg	cctcacctgg	3720
acaacgggtg	ttccccaaca	gctgataccg	ccgtcctggg	gacttgggct	tcttgccctc	3780
ataaggcaca	gagcagatgg	agatgggaca	gtggagccag	tttggttttc	tccctctgca	3840
ctaggccaag	aacttgctgc	cttgccctgtg	gggggtccca	tccggcttca	gagagctctg	3900
gctggcattg	accatggggg	aaagggctgg	tttcaggctg	acatatggcc	gcaggtccag	3960
ttcagcccag	gtctmtcatg	gttatcttcc	aacccactgt	cacgctgaca	ctatgctgcc	4020
atgcttgggc	tgtggaccta	ctgggcattt	gaggaaytgg	agaatggaga	tggcaagagg	4080
gcagctcttt	aagtttgggt	tggagacaac	ttcctgtggc	ccccacaagc	tgagtctggc	4140
ccttctccagc	tggccccaata	aaaggccttt	gctacatcct	gattatctct	gaaagtaatc	4200
aatcaagtgg	ctccagtagc	tctggatttt	ctgccagggc	tgggcccattg	tgggtgctgcc	4260

ccagtatgac	atgggaccaa	ggccagcgca	ggttatccac	ctctgcctgg	aagtctatac	4320
tctacccagg	gcatccctct	ggtcagagge	agtgagtact	gggaactgga	ggctgacctg	4380
tgcttagaag	tcctttaatc	tgggctggta	caggcctcag	ccttgccctc	aatgcacgaa	4440
aggtggccca	ggagagagga	tcaatgccat	aggaggcaga	agtctggcct	ctgtgcctct	4500
atggagacta	tcttccagtt	gctgctcaac	agagttgttg	gctgagacct	gcttgggagt	4560
ctctgctggc	ccttcactctg	ttcaggaaca	cacacacaca	cacactcaca	cacgcacaca	4620
caatcacaat	ttgctacagc	aacaaaaaag	acattgggct	gtggcattat	taattaaaga	4680
tgatatccag	tcaaaaaaaaa	act				4703

<210> 32

<211> 4405

<212> DNA

<213> Homo sapiens

<400> 32

gcggccgccc	cattcccaga	ccggccgcca	gcccattctg	ttagctcccg	ccgctccgcg	60
ccgcccggga	gtcgggagcc	gcggggaacc	gggcacctgc	acccgcctct	gggaggtctt	120
ctcccctgtc	tgccctcccg	agctaggact	gcagaggggc	ctatcatggt	gcttgacggc	180
cccctggctg	tctcgtgtgt	gctgcccagc	ctcacactgc	tggtgtccca	cctctccagc	240
tcccaggatg	tctccagtga	gcccagcagt	gagcagcagc	tgtgcgccct	tagcaagcac	300
cccaccgtgg	cctttgaaga	cctgcagccg	tgggtctcta	acttcacctc	ccctggagcc	360
cgggatttct	cccagctggc	tttggacccc	tccgggaacc	agctcatcgt	gggagccagg	420
aactacctct	tcagactcag	ccttgccaat	gtctctcttc	ttcaggccac	agagtgggcc	480
tccagtgagg	acacgcgccg	ctcctgccaa	agcaaaggga	agactgagga	ggagtgtcag	540
aactacgtgc	gagtcctgat	cgtcgccggc	cggaagggtg	tcatgtgtgg	aaccaatgcc	600
ttttcccca	tgtgcaccag	cagacagggt	gggaacctca	gccggactac	tgagaagatc	660
aatggtgtgg	cccgtgccc	ctatgaccca	cgccacaact	ccacagctgt	catctcctcc	720
cagggggagc	tctatgcagc	cacggtcctc	gacttctcag	gtcgggaccc	tgccatctac	780
cgcagcctgg	gcagtgggccc	accgcttcgc	actgcccaat	ataactccaa	gtggcttaat	840
gagccaaact	tcgtggcagc	ctatgatatt	gggctgtttg	catacttctt	cctgcgggag	900
aacgcagtgg	agcagcactg	tggacgcacc	gtgtactctc	gcgtggcccg	cgtgtgcaag	960
aatgacgtgg	ggggccgatt	cctgctggag	gacacatgga	ccacattcat	gaaggcccgg	1020
ctcaactgct	cccgcccggg	cgaggtcccc	ttctactata	acgagctgca	gagtgccttc	1080
cacttgccag	agcaggacct	catctatgga	gttttcacaa	ccaacgtaaa	cagcatcgcg	1140
gcttctgctg	tctgcgcctt	caacctcagt	gctatctccc	aggctttcaa	tgggccattt	1200
cgctaccagg	agaaccccag	ggctgcctgg	ctccccatag	ccaaccccat	ccccaatctc	1260
cagtgtggca	ccctgcctga	gaccgggtccc	aacgagaacc	tgacggagcg	cagcctgcag	1320
gacgcgcagc	gcctcttctt	gatgagcgag	gccgtgcagc	cggtgacacc	cgagccctgt	1380
gtcaccgagc	acagcgtgcg	ctctcacac	ctcgtggtgg	acctggtgca	ggctaaagac	1440
acgctctacc	atgtactcta	cattggcacc	gagtcgggca	ccatcctgaa	ggcgtgtccc	1500
acggcgagcc	gcagcctcca	cggtgcttac	ctggaggagc	tgacagtgct	gccccccggg	1560
cgccgcgagc	ccctgcgcag	cctgcgcctc	ctgcacagcg	cccgcgcgct	cttcgtgggg	1620
ctgagagacg	gcgtcctgcg	ggtcccactg	gagaggtgcg	ccgcctaccg	cagccagggg	1680
gcatgcctgg	gggcccggga	cccgtactgt	ggctgggacg	ggaagcagca	acgttgacgc	1740
acactcgagg	acagctccaa	catgagcctc	tggaccagga	acatcaccgc	ctgtcctgtg	1800
cggaatgtga	cacgggatgg	gggtctcggc	ccatggtcac	catggcaacc	atgtgagcac	1860
ttggatgggg	acaactcagg	ctcttgccctg	tgtcgagctc	gatcctgtga	ttcccctcga	1920
ccccgctgtg	ggggccttga	ctgctggggg	ccagccatcc	acatcgccaa	ctgctccagg	1980
aatggggcgt	ggaccccgtg	gtcatcgtgg	gcgtgtgca	gcacgtcctg	tggcatcggc	2040
ttccagggtcc	gccagcgaa	ttgcagcaac	cctgctcccc	gccacggggg	ccgcatctgc	2100
gtgggcaaga	gccgggagga	acggttctgt	aatgagaaca	cgcttgccc	ggtgcccctc	2160
ttctgggctt	cctggggctc	ctggagcaag	tgcagcagca	actgtggagg	gggcatgcag	2220
tcgcggcgtc	gggcctgcga	gaacggcaac	tcctgcctgg	gctgcggcgt	ggagttcaag	2280
acgtgcaacc	ccgagggctg	ccccgaagtg	cggcgcaaca	ccccctggac	gccgtggctg	2340
cccgtgaacg	tgacgcaggg	cggggcacgg	caggagcagc	ggttccgctt	cacctgccgc	2400
gcgccccttg	cagaccccgca	cggcctgcag	ttcggcagga	gaaggaccga	gacgagacc	2460
tgtcccgcgg	acggctccgg	ctcctgcgac	accgacgccc	tgggtggagg	cctcctgcgc	2520
agcgggagca	cctccccgca	cacgggtgagc	gggggctggg	ccgcctgggg	cccgtggctg	2580
tcctgctccc	gggaactgcga	gctgggcttc	cgcgtccgca	agagaacgtg	cactaaccgc	2640
gagccccgca	acgggggcct	gccctgcgtg	ggcgatgctg	ccgagtacca	ggactgcaac	2700

ccccaggctt	gcccagttcg	gggtgcttgg	tcctgctgga	cctcatggte	tccatgctca	2760
gcttcctgtg	gtgggggtca	ctatcaacgc	acccgttcct	gcaccagccc	cgcaccctcc	2820
ccaggtaggg	acatctgtct	cgggctgcac	acggaggagg	cactatgtgc	cacacaggcc	2880
tgcccagaag	gctggctgcc	ctggctctgag	tggagtaagt	gcactgacga	cggagccag	2940
agccgaagcc	ggcactgtga	ggagctcctc	ccagggtcca	gcgcmgtgtc	tggaaacagc	3000
agccagagcc	gccccctgcc	ctacagcgag	attcscgtca	tcctgccagc	ctccagcatg	3060
gaggaggcca	ccgactgtgc	agggttcaat	ctcatccact	tgggtggccac	gggcatctcc	3120
tgcttcttgg	gctctgggct	cctgacccta	gcagtgtacc	tgtcttgcca	gcactgccag	3180
cgtcagtccc	aggagtccac	actggtccat	cctgccaccc	ccaaccattt	gcactacaag	3240
ggcggaggca	ccccgaagaa	tgaaaagtac	acacccatgg	aattcaagac	cctgaacaag	3300
aataaacttga	tccctgatga	cagagccaac	ttctacccat	tgcagcagac	caatgtgtac	3360
acgactactt	actaccaaac	ccccctgaac	aaacacagct	tccggccccga	ggcctcacct	3420
ggacaacggg	gcttccccc	cagctgatac	cgccgtcctg	gggacttggg	cttcttgcc	3480
tcataaggga	cagagcagat	ggagatggga	cagtggagcc	agtttggttt	tctccctctg	3540
cactaggcca	agaacttgct	gccttgccctg	tgggggggtcc	catccggctt	cagagagctc	3600
tggctggcat	tgacctggg	ggaaagggt	ggtttcaggc	tgacatatgg	ccgcagggtcc	3660
agttcagccc	aggtctmtca	tggttatctt	ccaacccact	gtcacgctga	cactatgctg	3720
ccatgcctgg	gctgtggacc	tactgggcat	ttgaggaayt	ggagaatgga	gatggcaaga	3780
gggcaggctt	ttaagtttgg	gttgagaca	acttcctgtg	gccccacaa	gctgagctctg	3840
gccttctcca	gctggcccca	aaaaaggcct	ttgctacatc	ctgattatct	ctgaaagtaa	3900
tcaatcaagt	ggctccagta	gctctggatt	ttctgccagg	gctgggccat	tgtggtgctg	3960
ccccagtatg	acatgggacc	aaggccagcg	caggttatcc	acctctgcct	ggaagtctat	4020
actctaccca	gggatccct	ctggtcagag	gcagtgaagta	ctgggaactg	gaggctgacc	4080
tgtgcttaga	agtcctttaa	tctgggctgg	tacaggcttc	agccttgccc	tcaatgcacg	4140
aaagggtggc	caggagagag	gatcaatgcc	ataggaggca	gaagtctggc	ctctgtgcct	4200
ctatggagac	tatcttccag	ttgctgctca	acagagttgt	tggctgagac	ctgcttggga	4260
gtctctgctg	gcccttcac	tgttcaggaa	cacacacaca	cacacactca	cacacgcaca	4320
cacaatcaca	atttgctaca	gcaacaaaaa	agacattggg	ctgtggcatt	attaattaaa	4380
gatgatatcc	agtcaaaaaa	aaact				4405

<210> 33
 <211> 3938
 <212> DNA
 <213> Homo sapiens

<400> 33						
gcggccgccc	cattcccaga	cgggcggcca	gcccattctg	ttagctccc	ccgtccg	60
ccgcccggga	gtcgggagcc	gcggggaacc	gggcacctgc	acccgcctct	gggagtga	120
ggttccagct	ggtgcctggc	ctgtgtctct	tggatgcct	gtggcttcag	tccgtctcct	180
tgtgcccacc	acctcgtccc	tgggcgcgct	gatacccag	cccaacagct	aagggtgga	240
tggaacagtag	ggggctggct	tctctcactg	gtcaggggtc	ttctccctg	tctgcctccc	300
ggagctagga	ctgcagagg	gcctatcatg	gtgcttgacg	gccccctggc	tgtctcgtg	360
ttgctgccc	gcctcacact	gctggtgtcc	cacctctcca	gtctccagga	tgtctccagt	420
gagcccagca	gtgagcagca	gctgtgcgcc	cttagcaagc	acccaccgt	ggcctttgaa	480
gacctgcagc	cgtgggtctc	taacttcacc	taccctggag	cccgggattt	ctcccagctg	540
gctttggacc	cctccgggaa	ccagctcatc	gtgggagcca	ggaactacct	cttcagactc	600
agccttgcca	atgtctctct	tcttcaggcc	acagagtggg	cctccagtga	ggacacgcgc	660
cgctcctgcc	aaagcaaagg	gaagactgag	gaggagtgtc	agaactacgt	gcgagtccgt	720
atcgctcgcc	gccgggaagg	gttcatgtgt	ggaaccaatg	ccttttcccc	catgtgcacc	780
agcagacagg	tggggaacct	cagccggact	actgagaaga	tcaatggtgt	ggcccgtgc	840
ccctatgacc	caagccacaa	ctccacagct	gtcatctcct	cccaggggga	gctctatgca	900
gccacgggtca	tcgacttctc	aggtcgggac	cctgccatct	accgcagcct	gggcagtggg	960
ccaccgcttc	gcactgccc	atataactcc	aagtggctta	atgagccaaa	cttcgtggca	1020
gcctatgata	ttgggctgtt	tgcatacttc	ttcctgcggg	agaacgcagt	ggagcacgac	1080
tgtggacgca	ccgtgtactc	tcgcgtggcc	cgcgtgtgca	agaatgacgt	ggggggccga	1140
ttcctgctgg	aggacacatg	gaccacattc	atgaaggccc	ggctcaactg	ctcccggccc	1200
ggcgagggtcc	ccttctacta	taacgagctg	cagagtgcct	tccacttgcc	agagcaggac	1260
ctcatctatg	gagttttcac	aaccaacgta	aacagcatcg	cggcttctgc	tgtctgcgcc	1320
ttcaacctca	gtgctatctc	ccaggctttc	aatggcccat	ttcgtacca	ggagaacccc	1380
agggctgcct	ggctcccat	agccaacccc	atccccaatt	tccagtgtgg	caccctgcct	1440

gagaccggtc	ccaacgagaa	cctgacggag	cgcagcctgc	aggacgcgca	gcgcctcttc	1500
ctgatgagcg	aggccgtgca	gccggtgaca	cccagaccct	gtgtcaccca	ggacagcgtg	1560
cgctttctcac	acctcgtggt	ggacctggtg	caggctaaag	acacgctcta	ccatgtactc	1620
tacattggca	ccgagtcggg	caccatcctg	aaggcgctgt	ccacggcgag	ccgcagcctc	1680
cacggctgct	acctggagga	gctgcacgtg	ctgccccccg	ggcgccgcga	gcccctgcgc	1740
agcctgcgca	tcctgcacag	cgcccgcgcg	ctcttcgtgg	ggctgagaga	cggcgtcctg	1800
cgggtccac	tggagaggtg	cgccgcctac	cgcagccagg	gggcatgcct	gggggcccgg	1860
gacccgtact	gtggctggga	cgggaagcag	caacgttgca	gcacactcga	ggacagctcc	1920
aacatgagcc	tctggacca	gaacatcacc	gcctgtcctg	tgcggaatgt	gacacgggat	1980
gggggcttcg	gcccattggtc	accatggcaa	ccatgtgagc	acttggatgg	ggacaactca	2040
ggctcttgcc	tgtgtcagagc	tcgatcctgt	gattccccctc	gaccccgcgtg	tgggggcctt	2100
gactgcctgg	ggccagccat	ccacatcgcc	aactgtctca	ggaatggggc	gtggaccccg	2160
tggtcacgt	gggcgtgtg	cagcacgtcc	tgtggcatcg	gcttccaggt	ccgccagcga	2220
agttgcagca	accctgctcc	ccgccacggg	ggccgcctct	gcgtgggcaa	gagccgggag	2280
gaacgggttct	gtaatgagaa	cacgccttgc	ccggtgccca	tcttctgggc	ttcctggggc	2340
tctggagca	agtgcagcag	caactgtgga	gggggcatgc	agtcgcggcg	tcgggcctgc	2400
gagaacggca	actcctgcct	gggctgcggc	gtggagttca	agacgtgcaa	ccccgagggc	2460
tgccccgaag	tgcggcgcaa	caccccctgg	acgcctggtg	tgcccgtgaa	cgtgacgcag	2520
ggcggggcac	ggcaggagca	gcggttccgc	ttcacctgcc	gcgcgcccct	tgcagaccgc	2580
cacggcctgc	agttcggcag	gagaaggacc	gagacgagga	cctgtcccgc	ggacggctcc	2640
ggctcctgcg	acaccgacgc	cctggtggag	gtcctcctgc	gcagcgggag	cacctccccg	2700
cacacggtga	gcgggggctg	ggccgcctgg	ggcccggtgt	cgctcctgctc	ccgggactgc	2760
gagctgggct	tccgcgtccg	caagagaacg	tgcactaacc	cggagccccg	caacgggggc	2820
ctgccctgcg	tgggcgatgc	tgccgagtac	caggactgca	accccaggc	ttgccagtt	2880
cggggtgctt	ggtcctgctg	gacctcatgg	tctccatgct	cagcttctctg	tgggtgggggt	2940
cactatcaac	gcacccgttc	ctgcaccagc	cccgaccct	ccccagggtga	ggacatctgt	3000
ctcgggctgc	acacggagga	ggcactatgt	gccacacagg	cctgcccaga	aggctggctg	3060
ccctggctctg	agtggagtaa	gtgcactgac	gacggagccc	agagccgaag	ccggcactgt	3120
gaggagctcc	tcccagggtc	cagcgcmtgt	gctggaaaca	gcagccagag	ccgcccctgc	3180
ccctacagcg	agattcscgt	catcctgcca	gcctccagca	tggaggaggc	caccgactgt	3240
gcagggttca	atctcatcca	cttgggtggc	acgggcatct	cctgcttctt	gggctctggg	3300
ctcctgaccc	tagcagtga	cctgtcttgc	cagcactgcc	agcgtcagtc	ccaggagtcc	3360
acactggtcc	atcctgccac	cccccaaccat	ttgcactaca	agggcggagg	caccccgaag	3420
aatgaaaagt	acacacccat	ggaattcaag	accctgaaca	agaataactt	gatccctgat	3480
gacagagcca	acttctaccc	attgcagcag	accaatgcca	gcgcagggtta	tccacctctg	3540
cctggaagtc	tatactctac	ccagggcatc	cctctggtca	gaggcagtga	gtactgggaa	3600
ctggaggctg	acctgtgctt	agaagtcctt	taatctgggc	tggtagagge	ctcagccttg	3660
ccctcaatgc	acgaaagggtg	gcccaggaga	gaggatcaat	gccataggag	gcagaagtct	3720
ggcctctgtg	cctctatgga	gactatcttc	cagttgtctg	tcaacagagt	tgttggctga	3780
gacctgcttg	ggagtctctg	ctggcccttc	atctgttcag	gaacacacac	acacacacac	3840
tcacacacgc	acacacaatc	acaatttgct	acagcaacaa	aaaagacatt	gggctgtggc	3900
attattaatt	aaagatgata	tccagtcaaa	aaaaaact			3938

<210> 34
 <211> 1095
 <212> PRT
 <213> Homo sapiens

<400> 34
 Met Val Leu Ala Gly Pro Leu Ala Val Ser Leu Leu Leu Pro Ser Leu
 1 5 10 15
 Thr Leu Leu Val Ser His Leu Ser Ser Ser Gln Asp Val Ser Ser Glu
 20 25 30
 Pro Ser Ser Glu Gln Gln Leu Cys Ala Leu Ser Lys His Pro Thr Val
 35 40 45
 Ala Phe Glu Asp Leu Gln Pro Trp Val Ser Asn Phe Thr Tyr Pro Gly
 50 55 60

Ala Arg Asp Phe Ser Gln Leu Ala Leu Asp Pro Ser Gly Asn Gln Leu
 65 70 75 80
 Ile Val Gly Ala Arg Asn Tyr Leu Phe Arg Leu Ser Leu Ala Asn Val
 85 90 95
 Ser Leu Leu Gln Ala Thr Glu Trp Ala Ser Ser Glu Asp Thr Arg Arg
 100 105 110
 Ser Cys Gln Ser Lys Gly Lys Thr Glu Glu Glu Cys Gln Asn Tyr Val
 115 120 125
 Arg Val Leu Ile Val Ala Gly Arg Lys Val Phe Met Cys Gly Thr Asn
 130 135 140
 Ala Phe Ser Pro Met Cys Thr Ser Arg Gln Val Gly Asn Leu Ser Arg
 145 150 155 160
 Thr Thr Glu Lys Ile Asn Gly Val Ala Arg Cys Pro Tyr Asp Pro Arg
 165 170 175
 His Asn Ser Thr Ala Val Ile Ser Ser Gln Gly Glu Leu Tyr Ala Ala
 180 185 190
 Thr Val Ile Asp Phe Ser Gly Arg Asp Pro Ala Ile Tyr Arg Ser Leu
 195 200 205
 Gly Ser Gly Pro Pro Leu Arg Thr Ala Gln Tyr Asn Ser Lys Trp Leu
 210 215 220
 Asn Glu Pro Asn Phe Val Ala Ala Tyr Asp Ile Gly Leu Phe Ala Tyr
 225 230 235 240
 Phe Phe Leu Arg Glu Asn Ala Val Glu His Asp Cys Gly Arg Thr Val
 245 250 255
 Tyr Ser Arg Val Ala Arg Val Cys Lys Asn Asp Val Gly Gly Arg Phe
 260 265 270
 Leu Leu Glu Asp Thr Trp Thr Thr Phe Met Lys Ala Arg Leu Asn Cys
 275 280 285
 Ser Arg Pro Gly Glu Val Pro Phe Tyr Tyr Asn Glu Leu Gln Ser Ala
 290 295 300
 Phe His Leu Pro Glu Gln Asp Leu Ile Tyr Gly Val Phe Thr Thr Asn
 305 310 315 320
 Val Asn Ser Ile Ala Ala Ser Ala Val Cys Ala Phe Asn Leu Ser Ala
 325 330 335
 Ile Ser Gln Ala Phe Asn Gly Pro Phe Arg Tyr Gln Glu Asn Pro Arg
 340 345 350
 Ala Ala Trp Leu Pro Ile Ala Asn Pro Ile Pro Asn Phe Gln Cys Gly
 355 360 365
 Thr Leu Pro Glu Thr Gly Pro Asn Glu Asn Leu Thr Glu Arg Ser Leu
 370 375 380

Gln Asp Ala Gln Arg Leu Phe Leu Met Ser Glu Ala Val Gln Pro Val
 385 390 395 400
 Thr Pro Glu Pro Cys Val Thr Gln Asp Ser Val Arg Phe Ser His Leu
 405 410 415
 Val Val Asp Leu Val Gln Ala Lys Asp Thr Leu Tyr His Val Leu Tyr
 420 425 430
 Ile Gly Thr Glu Ser Gly Thr Ile Leu Lys Ala Leu Ser Thr Ala Ser
 435 440 445
 Arg Ser Leu His Gly Cys Tyr Leu Glu Glu Leu His Val Leu Pro Pro
 450 455 460
 Gly Arg Arg Glu Pro Leu Arg Ser Leu Arg Ile Leu His Ser Ala Arg
 465 470 475 480
 Ala Leu Phe Val Gly Leu Arg Asp Gly Val Leu Arg Val Pro Leu Glu
 485 490 495
 Arg Cys Ala Ala Tyr Arg Ser Gln Gly Ala Cys Leu Gly Ala Arg Asp
 500 505 510
 Pro Tyr Cys Gly Trp Asp Gly Lys Gln Gln Arg Cys Ser Thr Leu Glu
 515 520 525
 Asp Ser Ser Asn Met Ser Leu Trp Thr Gln Asn Ile Thr Ala Cys Pro
 530 535 540
 Val Arg Asn Val Thr Arg Asp Gly Gly Phe Gly Pro Trp Ser Pro Trp
 545 550 555 560
 Gln Pro Cys Glu His Leu Asp Gly Asp Asn Ser Gly Ser Cys Leu Cys
 565 570 575
 Arg Ala Arg Ser Cys Asp Ser Pro Arg Pro Arg Cys Gly Gly Leu Asp
 580 585 590
 Cys Leu Gly Pro Ala Ile His Ile Ala Asn Cys Ser Arg Asn Gly Gly
 595 600 605
 Arg Gly Pro Arg Gly Ala Ser Trp Ala Ala Val Gln Ala Arg Pro Val
 610 615 620
 Ala Ser Gly Phe Gln Val Arg Gln Arg Ser Cys Ser Asn Pro Ala Pro
 625 630 635 640
 Arg His Gly Gly Arg Ile Cys Val Gly Lys Ser Arg Glu Glu Arg Phe
 645 650 655
 Cys Asn Glu Asn Thr Pro Cys Pro Val Pro Ile Phe Trp Ala Ser Trp
 660 665 670
 Gly Ser Trp Ser Lys Cys Ser Ser Asn Cys Gly Gly Gly Met Gln Ser
 675 680 685
 Arg Arg Arg Ala Cys Glu Asn Gly Asn Ser Cys Leu Gly Cys Gly Val
 690 695 700
 Glu Phe Lys Thr Cys Asn Pro Glu Gly Cys Pro Glu Val Arg Arg Asn

705		710		715		720
Thr Pro Trp Thr	Pro Trp Leu Pro Val Asn Val Thr Gln Gly Gly Ala					
	725			730		735
Arg Gln Glu Gln Arg Phe Arg Phe Thr Cys Arg Ala Pro Leu Ala Asp						
	740			745		750
Pro His Gly Leu Gln Phe Gly Arg Arg Arg Thr Glu Thr Arg Thr Cys						
	755			760		765
Pro Ala Asp Gly Ser Gly Ser Cys Asp Thr Asp Ala Leu Val Glu Val						
	770			775		780
Leu Leu Arg Ser Gly Ser Thr Ser Pro His Thr Val Ser Gly Gly Trp						
	785			790		800
Ala Ala Trp Gly Pro Trp Ser Ser Cys Ser Arg Asp Cys Glu Leu Gly						
	805			810		815
Phe Arg Val Arg Lys Arg Thr Cys Thr Asn Pro Glu Pro Arg Asn Gly						
	820			825		830
Gly Leu Pro Cys Val Gly Asp Ala Ala Glu Tyr Gln Asp Cys Asn Pro						
	835			840		845
Gln Ala Cys Pro Val Arg Gly Ala Trp Ser Cys Trp Thr Ser Trp Ser						
	850			855		860
Pro Cys Ser Ala Ser Cys Gly Gly Gly His Tyr Gln Arg Thr Arg Ser						
	865			870		875
Cys Thr Ser Pro Ala Pro Ser Pro Gly Glu Asp Ile Cys Leu Gly Leu						
	885			890		895
His Thr Glu Glu Ala Leu Cys Ala Thr Gln Ala Cys Pro Glu Gly Trp						
	900			905		910
Ser Pro Trp Ser Glu Trp Ser Lys Cys Thr Asp Asp Gly Ala Gln Ser						
	915			920		925
Arg Ser Arg His Cys Glu Glu Leu Leu Pro Gly Ser Ser Ala Cys Ala						
	930			935		940
Gly Asn Ser Ser Gln Ser Arg Pro Cys Pro Tyr Ser Glu Ile Arg Val						
	945			950		955
Ile Leu Pro Ala Ser Ser Met Glu Glu Ala Thr Asp Cys Ala Gly Phe						
	965			970		975
Asn Leu Ile His Leu Val Ala Thr Gly Ile Ser Cys Phe Leu Gly Ser						
	980			985		990
Gly Leu Leu Thr Leu Ala Val Tyr Leu Ser Cys Gln His Cys Gln Arg						
	995			1000		1005
Gln Ser Gln Glu Ser Thr Leu Val His Pro Ala Thr Pro Asn His						
	1010			1015		1020
Leu His Tyr Lys Gly Gly Gly Thr Pro Lys Asn Glu Lys Tyr Thr						
	1025			1030		1035

Pro Met Glu Phe Lys Thr Leu Asn Lys Asn Asn Leu Ile Pro Asp
 1040 1045 1050
 Asp Arg Ala Asn Phe Tyr Pro Leu Gln Gln Thr Asn Val Tyr Thr
 1055 1060 1065
 Thr Thr Tyr Tyr Pro Ser Pro Leu Asn Lys His Ser Phe Arg Pro
 1070 1075 1080
 Glu Ala Ser Pro Gly Gln Arg Cys Phe Pro Asn Ser
 1085 1090 1095

<210> 35
 <211> 1248
 <212> PRT
 <213> Homo sapiens

<400> 35
 Arg Pro Pro His Ser Gln Thr Gly Arg Gln Pro Ile Trp Leu Ala Pro
 1 5 10 15
 Ala Ala Pro Arg Arg Pro Gly Val Gly Ser Arg Gly Glu Pro Gly Thr
 20 25 30
 Cys Thr Arg Leu Trp Glu Pro Ala Trp Val Arg Val Ala Leu Gly Pro
 35 40 45
 Ala Arg Ala Val Val Gly Ala Ser Gly Leu Gln Arg Arg Trp Gly Pro
 50 55 60
 Gly Thr Gln Ala Trp Arg Arg Arg Arg Thr Ser Glu Ala Glu Gly Arg
 65 70 75 80
 Arg Asp Arg Val Ser Gly Ser Ser Trp Cys Leu Ala Cys Val Ser Trp
 85 90 95
 Met Pro Cys Gly Phe Ser Pro Ser Pro Val Ala His His Leu Val Pro
 100 105 110
 Gly Pro Pro Asp Thr Pro Ala Gln Gln Leu Arg Cys Gly Trp Thr Val
 115 120 125
 Gly Gly Trp Leu Leu Ser Leu Val Arg Gly Leu Leu Pro Cys Leu Pro
 130 135 140
 Pro Gly Ala Arg Thr Ala Glu Gly Pro Ile Met Val Leu Ala Gly Pro
 145 150 155 160
 Leu Ala Val Ser Leu Leu Leu Pro Ser Leu Thr Leu Leu Val Ser His
 165 170 175
 Leu Ser Ser Ser Gln Asp Val Ser Ser Glu Pro Ser Ser Glu Gln Gln
 180 185 190
 Leu Cys Ala Leu Ser Lys His Pro Thr Val Ala Phe Glu Asp Leu Gln
 195 200 205
 Pro Trp Val Ser Asn Phe Thr Tyr Pro Gly Ala Arg Asp Phe Ser Gln
 210 215 220

Leu Ala Leu Asp Pro Ser Gly Asn Gln Leu Ile Val Gly Ala Arg Asn
 225 230 235 240
 Tyr Leu Phe Arg Leu Ser Leu Ala Asn Val Ser Leu Leu Gln Ala Thr
 245 250 255
 Glu Trp Ala Ser Ser Glu Asp Thr Arg Arg Ser Cys Gln Ser Lys Gly
 260 265 270
 Lys Thr Glu Glu Glu Cys Gln Asn Tyr Val Arg Val Leu Ile Val Ala
 275 280 285
 Gly Arg Lys Val Phe Met Cys Gly Thr Asn Ala Phe Ser Pro Met Cys
 290 295 300
 Thr Ser Arg Gln Val Gly Asn Leu Ser Arg Thr Thr Glu Lys Ile Asn
 305 310 315 320
 Gly Val Ala Arg Cys Pro Tyr Asp Pro Arg His Asn Ser Thr Ala Val
 325 330 335
 Ile Ser Ser Gln Gly Glu Leu Tyr Ala Ala Thr Val Ile Asp Phe Ser
 340 345 350
 Gly Arg Asp Pro Ala Ile Tyr Arg Ser Leu Gly Ser Gly Pro Pro Leu
 355 360 365
 Arg Thr Ala Gln Tyr Asn Ser Lys Trp Leu Asn Glu Pro Asn Phe Val
 370 375 380
 Ala Ala Tyr Asp Ile Gly Leu Phe Ala Tyr Phe Phe Leu Arg Glu Asn
 385 390 395 400
 Ala Val Glu His Asp Cys Gly Arg Thr Val Tyr Ser Arg Val Ala Arg
 405 410 415
 Val Cys Lys Asn Asp Val Gly Gly Arg Phe Leu Leu Glu Asp Thr Trp
 420 425 430
 Thr Thr Phe Met Lys Ala Arg Leu Asn Cys Ser Arg Pro Gly Glu Val
 435 440 445
 Pro Phe Tyr Tyr Asn Glu Leu Gln Ser Ala Phe His Leu Pro Glu Gln
 450 455 460
 Asp Leu Ile Tyr Gly Val Phe Thr Thr Asn Val Asn Ser Ile Ala Ala
 465 470 475 480
 Ser Ala Val Cys Ala Phe Asn Leu Ser Ala Ile Ser Gln Ala Phe Asn
 485 490 495
 Gly Pro Phe Arg Tyr Gln Glu Asn Pro Arg Ala Ala Trp Leu Pro Ile
 500 505 510
 Ala Asn Pro Ile Pro Asn Phe Gln Cys Gly Thr Leu Pro Glu Thr Gly
 515 520 525
 Pro Asn Glu Asn Leu Thr Glu Arg Ser Leu Gln Asp Ala Gln Arg Leu
 530 535 540

Phe Leu Met Ser Glu Ala Val Gln Pro Val Thr Pro Glu Pro Cys Val
 545 550 555 560
 Thr Gln Asp Ser Val Arg Phe Ser His Leu Val Val Asp Leu Val Gln
 565 570 575
 Ala Lys Asp Thr Leu Tyr His Val Leu Tyr Ile Gly Thr Glu Ser Gly
 580 585 590
 Thr Ile Leu Lys Ala Leu Ser Thr Ala Ser Arg Ser Leu His Gly Cys
 595 600 605
 Tyr Leu Glu Glu Leu His Val Leu Pro Pro Gly Arg Arg Glu Pro Leu
 610 615 620
 Arg Ser Leu Arg Ile Leu His Ser Ala Arg Ala Leu Phe Val Gly Leu
 625 630 635 640
 Arg Asp Gly Val Leu Arg Val Pro Leu Glu Arg Cys Ala Ala Tyr Arg
 645 650 655
 Ser Gln Gly Ala Cys Leu Gly Ala Arg Asp Pro Tyr Cys Gly Trp Asp
 660 665 670
 Gly Lys Gln Gln Arg Cys Ser Thr Leu Glu Asp Ser Ser Asn Met Ser
 675 680 685
 Leu Trp Thr Gln Asn Ile Thr Ala Cys Pro Val Arg Asn Val Thr Arg
 690 695 700
 Asp Gly Gly Phe Gly Pro Trp Ser Pro Trp Gln Pro Cys Glu His Leu
 705 710 715 720
 Asp Gly Asp Asn Ser Gly Ser Cys Leu Cys Arg Ala Arg Ser Cys Asp
 725 730 735
 Ser Pro Arg Pro Arg Cys Gly Gly Leu Asp Cys Leu Gly Pro Ala Ile
 740 745 750
 His Ile Ala Asn Cys Ser Arg Asn Gly Ala Val Asp Pro Val Val Ile
 755 760 765
 Val Gly Arg Cys Ala Ala Thr Ser Cys Gly Ile Gly Phe Gln Val Arg
 770 775 780
 Gln Arg Ser Cys Ser Asn Pro Ala Pro Arg His Gly Gly Arg Ile Cys
 785 790 795 800
 Val Gly Lys Ser Arg Glu Glu Arg Phe Cys Asn Glu Asn Thr Pro Cys
 805 810 815
 Pro Val Pro Ile Phe Trp Ala Ser Trp Gly Ser Trp Ser Lys Cys Ser
 820 825 830
 Ser Asn Cys Gly Gly Gly Met Gln Ser Arg Arg Arg Ala Cys Glu Asn
 835 840 845
 Gly Asn Ser Cys Leu Gly Cys Gly Val Glu Phe Lys Thr Cys Asn Pro
 850 855 860
 Glu Gly Cys Pro Glu Val Arg Arg Asn Thr Pro Trp Thr Pro Trp Leu

865		870		875		880
Pro Val Asn Val Thr Gln Gly Gly Ala Arg Gln Glu Gln Arg Phe Arg						
		885		890		895
Phe Thr Cys Arg Ala Pro Leu Ala Asp Pro His Gly Leu Gln Phe Gly						
		900		905		910
Arg Arg Arg Thr Glu Thr Arg Thr Cys Pro Ala Asp Gly Ser Gly Ser						
		915		920		925
Cys Asp Thr Asp Ala Leu Val Glu Val Leu Leu Arg Ser Gly Ser Thr						
		930		935		940
Ser Pro His Thr Val Ser Gly Gly Trp Ala Ala Trp Gly Pro Trp Ser						
945		950		955		960
Ser Cys Ser Arg Asp Cys Glu Leu Gly Phe Arg Val Arg Lys Arg Thr						
		965		970		975
Cys Thr Asn Pro Glu Pro Arg Asn Gly Gly Leu Pro Cys Val Gly Asp						
		980		985		990
Ala Ala Glu Tyr Gln Asp Cys Asn Pro Gln Ala Cys Pro Val Arg Gly						
		995		1000		1005
Ala Trp Ser Cys Trp Thr Ser Trp Ser Pro Cys Ser Ala Ser Cys						
1010		1015		1020		
Gly Gly Gly His Tyr Gln Arg Thr Arg Ser Cys Thr Ser Pro Ala						
1025		1030		1035		
Pro Ser Pro Gly Glu Asp Ile Cys Leu Gly Leu His Thr Glu Glu						
1040		1045		1050		
Ala Leu Cys Ala Thr Gln Ala Cys Pro Glu Gly Trp Ser Pro Trp						
1055		1060		1065		
Ser Glu Trp Ser Lys Cys Thr Asp Asp Gly Ala Gln Ser Arg Ser						
1070		1075		1080		
Arg His Cys Glu Glu Leu Leu Pro Gly Ser Ser Ala Cys Ala Gly						
1085		1090		1095		
Asn Ser Ser Gln Ser Arg Pro Cys Pro Tyr Ser Glu Ile Arg Val						
1100		1105		1110		
Ile Leu Pro Ala Ser Ser Met Glu Glu Ala Thr Asp Cys Ala Gly						
1115		1120		1125		
Phe Asn Leu Ile His Leu Val Ala Thr Gly Ile Ser Cys Phe Leu						
1130		1135		1140		
Gly Ser Gly Leu Leu Thr Leu Ala Val Tyr Leu Ser Cys Gln His						
1145		1150		1155		
Cys Gln Arg Gln Ser Gln Glu Ser Thr Leu Val His Pro Ala Thr						
1160		1165		1170		
Pro Asn His Leu His Tyr Lys Gly Gly Gly Thr Pro Lys Asn Glu						
1175		1180		1185		

Lys Tyr Thr Pro Met Glu Phe Lys Thr Leu Asn Lys Asn Asn Leu
 1190 1195 1200

Ile Pro Asp Asp Arg Ala Asn Phe Tyr Pro Leu Gln Gln Thr Asn
 1205 1210 1215

Val Tyr Thr Thr Thr Tyr Tyr Pro Ser Pro Leu Asn Lys His Ser
 1220 1225 1230

Phe Arg Pro Glu Ala Ser Pro Gly Gln Arg Cys Phe Pro Asn Ser
 1235 1240 1245

<210> 36
 <211> 1150
 <212> PRT
 <213> Homo sapiens

<400> 36
 Ala Ala Ala Pro Phe Pro Asp Arg Pro Pro Ala His Leu Val Ser Ser
 1 5 10 15

Arg Arg Ser Ala Pro Pro Gly Ser Arg Glu Pro Arg Gly Thr Gly His
 20 25 30

Leu His Pro Pro Leu Gly Gly Leu Leu Pro Cys Leu Pro Pro Gly Ala
 35 40 45

Arg Thr Ala Glu Gly Pro Ile Met Val Leu Ala Gly Pro Leu Ala Val
 50 55 60

Ser Leu Leu Leu Pro Ser Leu Thr Leu Leu Val Ser His Leu Ser Ser
 65 70 75 80

Ser Gln Asp Val Ser Ser Glu Pro Ser Ser Glu Gln Gln Leu Cys Ala
 85 90 95

Leu Ser Lys His Pro Thr Val Ala Phe Glu Asp Leu Gln Pro Trp Val
 100 105 110

Ser Asn Phe Thr Tyr Pro Gly Ala Arg Asp Phe Ser Gln Leu Ala Leu
 115 120 125

Asp Pro Ser Gly Asn Gln Leu Ile Val Gly Ala Arg Asn Tyr Leu Phe
 130 135 140

Arg Leu Ser Leu Ala Asn Val Ser Leu Leu Gln Ala Thr Glu Trp Ala
 145 150 155 160

Ser Ser Glu Asp Thr Arg Arg Ser Cys Gln Ser Lys Gly Lys Thr Glu
 165 170 175

Glu Glu Cys Gln Asn Tyr Val Arg Val Leu Ile Val Ala Gly Arg Lys
 180 185 190

Val Phe Met Cys Gly Thr Asn Ala Phe Ser Pro Met Cys Thr Ser Arg
 195 200 205

Gln Val Gly Asn Leu Ser Arg Thr Thr Glu Lys Ile Asn Gly Val Ala

210	215	220
Arg Cys Pro Tyr Asp 225	Pro Arg His Asn Ser 230	Thr Ala Val Ile Ser Ser 235 240
Gln Gly Glu Leu Tyr 245	Ala Ala Thr Val Ile 250	Asp Phe Ser Gly Arg Asp 255
Pro Ala Ile Tyr Arg 260	Ser Leu Gly Ser Gly 265	Pro Pro Leu Arg Thr Ala 270
Gln Tyr Asn Ser Lys 275	Trp Leu Asn Glu Pro 280	Asn Phe Val Ala Ala Tyr 285
Asp Ile Gly Leu Phe 290	Ala Tyr Phe Phe Leu 295	Arg Glu Asn Ala Val Glu 300
His Asp Cys Gly Arg 305	Thr Val Tyr Ser Arg 310	Val Ala Arg Val Cys Lys 315 320
Asn Asp Val Gly Gly 325	Arg Phe Leu Leu Glu 330	Asp Thr Trp Thr Thr Phe 335
Met Lys Ala Arg Leu 340	Asn Cys Ser Arg Pro 345	Gly Glu Val Pro Phe Tyr 350
Tyr Asn Glu Leu Gln 355	Ser Ala Phe His Leu 360	Pro Glu Gln Asp Leu Ile 365
Tyr Gly Val Phe Thr 370	Thr Asn Val Asn Ser 375	Ile Ala Ala Ser Ala Val 380
Cys Ala Phe Asn Leu 385	Ser Ala Ile Ser Gln 390	Ala Phe Asn Gly Pro Phe 395 400
Arg Tyr Gln Glu Asn 405	Pro Arg Ala Ala Trp 410	Leu Pro Ile Ala Asn Pro 415
Ile Pro Asn Phe Gln 420	Cys Gly Thr Leu Pro 425	Glu Thr Gly Pro Asn Glu 430
Asn Leu Thr Glu Arg 435	Ser Leu Gln Asp Ala 440	Gln Arg Leu Phe Leu Met 445
Ser Glu Ala Val Gln 450	Pro Val Thr Pro Glu 455	Pro Cys Val Thr Gln Asp 460
Ser Val Arg Phe Ser 465	His Leu Val Val Asp 470	Leu Val Gln Ala Lys Asp 475 480
Thr Leu Tyr His Val 485	Leu Tyr Ile Gly Thr 490	Glu Ser Gly Thr Ile Leu 495
Lys Ala Leu Ser Thr 500	Ala Ser Arg Ser Leu 505	His Gly Cys Tyr Leu Glu 510
Glu Leu His Val Leu 515	Pro Pro Gly Arg Arg 520	Glu Pro Leu Arg Ser Leu 525
Arg Ile Leu His Ser 530	Ala Arg Ala Leu Phe 535	Val Gly Leu Arg Asp Gly 540

Val Leu Arg Val Pro Leu Glu Arg Cys Ala Ala Tyr Arg Ser Gln Gly
 545 550 555 560
 Ala Cys Leu Gly Ala Arg Asp Pro Tyr Cys Gly Trp Asp Gly Lys Gln
 565 570 575
 Gln Arg Cys Ser Thr Leu Glu Asp Ser Ser Asn Met Ser Leu Trp Thr
 580 585 590
 Gln Asn Ile Thr Ala Cys Pro Val Arg Asn Val Thr Arg Asp Gly Gly
 595 600 605
 Phe Gly Pro Trp Ser Pro Trp Gln Pro Cys Glu His Leu Asp Gly Asp
 610 615 620
 Asn Ser Gly Ser Cys Leu Cys Arg Ala Arg Ser Cys Asp Ser Pro Arg
 625 630 635 640
 Pro Arg Cys Gly Gly Leu Asp Cys Leu Gly Pro Ala Ile His Ile Ala
 645 650 655
 Asn Cys Ser Arg Asn Gly Ala Val Asp Pro Val Val His Arg Gly Pro
 660 665 670
 Leu Cys Ser His Val Leu Trp His Ala Ala Ser Arg Ser Ala Ser Glu
 675 680 685
 Val Ala Ala Thr Leu Leu Pro Ala Thr Gly Ala Ala Ser Ala Trp Ala
 690 695 700
 Arg Ala Trp Glu Glu Arg Phe Cys Asn Glu Asn Thr Pro Cys Pro Val
 705 710 715 720
 Pro Ile Phe Trp Ala Ser Trp Gly Ser Trp Ser Lys Cys Ser Ser Asn
 725 730 735
 Cys Gly Gly Gly Met Gln Ser Arg Arg Arg Ala Cys Glu Asn Gly Asn
 740 745 750
 Ser Cys Leu Gly Cys Gly Val Glu Phe Lys Thr Cys Asn Pro Glu Gly
 755 760 765
 Cys Pro Glu Val Arg Arg Asn Thr Pro Trp Thr Pro Trp Leu Pro Val
 770 775 780
 Asn Val Thr Gln Gly Gly Ala Arg Gln Glu Gln Arg Phe Arg Phe Thr
 785 790 795 800
 Cys Arg Ala Pro Leu Ala Asp Pro His Gly Leu Gln Phe Gly Arg Arg
 805 810 815
 Arg Thr Glu Thr Arg Thr Cys Pro Ala Asp Gly Ser Gly Ser Cys Asp
 820 825 830
 Thr Asp Ala Leu Val Glu Val Leu Leu Arg Ser Gly Ser Thr Ser Pro
 835 840 845
 His Thr Val Ser Gly Gly Trp Ala Ala Trp Gly Pro Trp Ser Ser Cys
 850 855 860

Ser Arg Asp Cys Glu Leu Gly Phe Arg Val Arg Lys Arg Thr Cys Thr
 865 870 875 880
 Asn Pro Glu Pro Arg Asn Gly Gly Leu Pro Cys Val Gly Asp Ala Ala
 885 890 895
 Glu Tyr Gln Asp Cys Asn Pro Gln Ala Cys Pro Val Arg Gly Ala Trp
 900 905 910
 Ser Cys Trp Thr Ser Trp Ser Pro Cys Ser Ala Ser Cys Gly Gly Gly
 915 920 925
 His Tyr Gln Arg Thr Arg Ser Cys Thr Ser Pro Ala Pro Ser Pro Gly
 930 935 940
 Glu Asp Ile Cys Leu Gly Leu His Thr Glu Glu Ala Leu Cys Ala Thr
 945 950 955 960
 Gln Ala Cys Pro Glu Gly Trp Ser Pro Trp Ser Glu Trp Ser Lys Cys
 965 970 975
 Thr Asp Asp Gly Ala Gln Ser Arg Ser Arg His Cys Glu Glu Leu Leu
 980 985 990
 Pro Gly Ser Ser Ala Cys Ala Gly Asn Ser Ser Gln Ser Arg Pro Cys
 995 1000 1005
 Pro Tyr Ser Glu Ile Arg Val Ile Leu Pro Ala Ser Ser Met Glu
 1010 1015 1020
 Glu Ala Thr Asp Cys Ala Gly Phe Asn Leu Ile His Leu Val Ala
 1025 1030 1035
 Thr Gly Ile Ser Cys Phe Leu Gly Ser Gly Leu Leu Thr Leu Ala
 1040 1045 1050
 Val Tyr Leu Ser Cys Gln His Cys Gln Arg Gln Ser Gln Glu Ser
 1055 1060 1065
 Thr Leu Val His Pro Ala Thr Pro Asn His Leu His Tyr Lys Gly
 1070 1075 1080
 Gly Gly Thr Pro Lys Asn Glu Lys Tyr Thr Pro Met Glu Phe Lys
 1085 1090 1095
 Thr Leu Asn Lys Asn Asn Leu Ile Pro Asp Asp Arg Ala Asn Phe
 1100 1105 1110
 Tyr Pro Leu Gln Gln Thr Asn Val Tyr Thr Thr Thr Tyr Tyr Pro
 1115 1120 1125
 Ser Pro Leu Asn Lys His Ser Phe Arg Pro Glu Ala Ser Pro Gly
 1130 1135 1140
 Gln Arg Cys Phe Pro Asn Ser
 1145 1150

<210> 37
 <211> 1211
 <212> PRT

<213> Homo sapiens

<400> 37

Ala Ala Ala Pro Phe Pro Asp Arg Pro Pro Ala His Leu Val Ser Ser
 1 5 10 15
 Arg Arg Ser Ala Pro Pro Gly Ser Arg Glu Pro Arg Gly Thr Gly His
 20 25 30
 Leu His Pro Pro Leu Gly Val Ser Gly Ser Ser Trp Cys Leu Ala Cys
 35 40 45
 Val Ser Trp Met Pro Cys Gly Phe Ser Pro Ser Pro Val Ala His His
 50 55 60
 Leu Val Pro Gly Pro Pro Asp Thr Pro Ala Gln Gln Leu Arg Cys Gly
 65 70 75 80
 Trp Thr Val Gly Gly Trp Leu Leu Ser Leu Val Arg Gly Leu Leu Pro
 85 90 95
 Cys Leu Pro Pro Gly Ala Arg Thr Ala Glu Gly Pro Ile Met Val Leu
 100 105 110
 Ala Gly Pro Leu Ala Val Ser Leu Leu Leu Pro Ser Leu Thr Leu Leu
 115 120 125
 Val Ser His Leu Ser Ser Ser Gln Asp Val Ser Ser Glu Pro Ser Ser
 130 135 140
 Glu Gln Gln Leu Cys Ala Leu Ser Lys His Pro Thr Val Ala Phe Glu
 145 150 155 160
 Asp Leu Gln Pro Trp Val Ser Asn Phe Thr Tyr Pro Gly Ala Arg Asp
 165 170 175
 Phe Ser Gln Leu Ala Leu Asp Pro Ser Gly Asn Gln Leu Ile Val Gly
 180 185 190
 Ala Arg Asn Tyr Leu Phe Arg Leu Ser Leu Ala Asn Val Ser Leu Leu
 195 200 205
 Gln Ala Thr Glu Trp Ala Ser Ser Glu Asp Thr Arg Arg Ser Cys Gln
 210 215 220
 Ser Lys Gly Lys Thr Glu Glu Glu Cys Gln Asn Tyr Val Arg Val Leu
 225 230 235 240
 Ile Val Ala Gly Arg Lys Val Phe Met Cys Gly Thr Asn Ala Phe Ser
 245 250 255
 Pro Met Cys Thr Ser Arg Gln Val Gly Asn Leu Ser Arg Thr Thr Glu
 260 265 270
 Lys Ile Asn Gly Val Ala Arg Cys Pro Tyr Asp Pro Arg His Asn Ser
 275 280 285
 Thr Ala Val Ile Ser Ser Gln Gly Glu Leu Tyr Ala Ala Thr Val Ile
 290 295 300
 Asp Phe Ser Gly Arg Asp Pro Ala Ile Tyr Arg Ser Leu Gly Ser Gly

305		310		315		320									
Pro	Pro	Leu	Arg	Thr	Ala	Gln	Tyr	Asn	Ser	Lys	Trp	Leu	Asn	Glu	Pro
				325					330					335	
Asn	Phe	Val	Ala	Ala	Tyr	Asp	Ile	Gly	Leu	Phe	Ala	Tyr	Phe	Phe	Leu
			340					345					350		
Arg	Glu	Asn	Ala	Val	Glu	His	Asp	Cys	Gly	Arg	Thr	Val	Tyr	Ser	Arg
		355					360					365			
Val	Ala	Arg	Val	Cys	Lys	Asn	Asp	Val	Gly	Gly	Arg	Phe	Leu	Leu	Glu
	370					375					380				
Asp	Thr	Trp	Thr	Thr	Phe	Met	Lys	Ala	Arg	Leu	Asn	Cys	Ser	Arg	Pro
385					390					395					400
Gly	Glu	Val	Pro	Phe	Tyr	Tyr	Asn	Glu	Leu	Gln	Ser	Ala	Phe	His	Leu
				405					410					415	
Pro	Glu	Gln	Asp	Leu	Ile	Tyr	Gly	Val	Phe	Thr	Thr	Asn	Val	Asn	Ser
			420					425					430		
Ile	Ala	Ala	Ser	Ala	Val	Cys	Ala	Phe	Asn	Leu	Ser	Ala	Ile	Ser	Gln
		435					440					445			
Ala	Phe	Asn	Gly	Pro	Phe	Arg	Tyr	Gln	Glu	Asn	Pro	Arg	Ala	Ala	Trp
	450					455					460				
Leu	Pro	Ile	Ala	Asn	Pro	Ile	Pro	Asn	Phe	Gln	Cys	Gly	Thr	Leu	Pro
465					470					475					480
Glu	Thr	Gly	Pro	Asn	Glu	Asn	Leu	Thr	Glu	Arg	Ser	Leu	Gln	Asp	Ala
				485					490					495	
Gln	Arg	Leu	Phe	Leu	Met	Ser	Glu	Ala	Val	Gln	Pro	Val	Thr	Pro	Glu
			500					505					510		
Pro	Cys	Val	Thr	Gln	Asp	Ser	Val	Arg	Phe	Ser	His	Leu	Val	Val	Asp
		515					520					525			
Leu	Val	Gln	Ala	Lys	Asp	Thr	Leu	Tyr	His	Val	Leu	Tyr	Ile	Gly	Thr
	530					535					540				
Glu	Ser	Gly	Thr	Ile	Leu	Lys	Ala	Leu	Ser	Thr	Ala	Ser	Arg	Ser	Leu
545					550					555					560
His	Gly	Cys	Tyr	Leu	Glu	Glu	Leu	His	Val	Leu	Pro	Pro	Gly	Arg	Arg
				565					570					575	
Glu	Pro	Leu	Arg	Ser	Leu	Arg	Ile	Leu	His	Ser	Ala	Arg	Ala	Leu	Phe
			580					585					590		
Val	Gly	Leu	Arg	Asp	Gly	Val	Leu	Arg	Val	Pro	Leu	Glu	Arg	Cys	Ala
		595					600					605			
Ala	Tyr	Arg	Ser	Gln	Gly	Ala	Cys	Leu	Gly	Ala	Arg	Asp	Pro	Tyr	Cys
	610					615					620				
Gly	Trp	Asp	Gly	Lys	Gln	Gln	Arg	Cys	Ser	Thr	Leu	Glu	Asp	Ser	Ser
625					630					635					640

Asn Met Ser Leu Trp Thr Gln Asn Ile Thr Ala Cys Pro Val Arg Asn
 645 650 655
 Val Thr Arg Asp Gly Gly Phe Gly Pro Trp Ser Pro Trp Gln Pro Cys
 660 665 670
 Glu His Leu Asp Gly Asp Asn Ser Gly Ser Cys Leu Cys Arg Ala Arg
 675 680 685
 Ser Cys Asp Ser Pro Arg Pro Arg Cys Gly Gly Leu Asp Cys Leu Gly
 690 695 700
 Pro Ala Ile His Ile Ala Asn Cys Ser Arg Asn Gly Ala Val Asp Pro
 705 710 715 720
 Val Val Ile Val Gly Arg Cys Ala Ala Thr Ser Cys Gly Ile Gly Phe
 725 730 735
 Gln Val Arg Gln Arg Ser Cys Ser Asn Pro Ala Pro Arg His Gly Gly
 740 745 750
 Arg Ile Cys Val Gly Lys Ser Arg Glu Glu Arg Phe Cys Asn Glu Asn
 755 760 765
 Thr Pro Cys Pro Val Pro Ile Phe Trp Ala Ser Trp Gly Ser Trp Ser
 770 775 780
 Lys Cys Ser Ser Asn Cys Gly Gly Gly Met Gln Ser Arg Arg Arg Ala
 785 790 795 800
 Cys Glu Asn Gly Asn Ser Cys Leu Gly Cys Gly Val Glu Phe Lys Thr
 805 810 815
 Cys Asn Pro Glu Gly Cys Pro Glu Val Arg Arg Asn Thr Pro Trp Thr
 820 825 830
 Pro Trp Leu Pro Val Asn Val Thr Gln Gly Gly Ala Arg Gln Glu Gln
 835 840 845
 Arg Phe Arg Phe Thr Cys Arg Ala Pro Leu Ala Asp Pro His Gly Leu
 850 855 860
 Gln Phe Gly Arg Arg Arg Thr Glu Thr Arg Thr Cys Pro Ala Asp Gly
 865 870 875 880
 Ser Gly Ser Cys Asp Thr Asp Ala Leu Val Glu Val Leu Leu Arg Ser
 885 890 895
 Gly Ser Thr Ser Pro His Thr Val Ser Gly Gly Trp Ala Ala Trp Gly
 900 905 910
 Pro Trp Ser Ser Cys Ser Arg Asp Cys Glu Leu Gly Phe Arg Val Arg
 915 920 925
 Lys Arg Thr Cys Thr Asn Pro Glu Pro Arg Asn Gly Gly Leu Pro Cys
 930 935 940
 Val Gly Asp Ala Ala Glu Tyr Gln Asp Cys Asn Pro Gln Ala Cys Pro
 945 950 955 960

Val Arg Gly Ala Trp Ser Cys Trp Thr Ser Trp Ser Pro Cys Ser Ala
 965 970 975
 Ser Cys Gly Gly Gly His Tyr Gln Arg Thr Arg Ser Cys Thr Ser Pro
 980 985 990
 Ala Pro Ser Pro Gly Glu Asp Ile Cys Leu Gly Leu His Thr Glu Glu
 995 1000 1005
 Ala Leu Cys Ala Thr Gln Ala Cys Pro Glu Gly Trp Ser Pro Trp
 1010 1015 1020
 Ser Glu Trp Ser Lys Cys Thr Asp Asp Gly Ala Gln Ser Arg Ser
 1025 1030 1035
 Arg His Cys Glu Glu Leu Leu Pro Gly Ser Ser Ala Cys Ala Gly
 1040 1045 1050
 Asn Ser Ser Gln Ser Arg Pro Cys Pro Tyr Ser Glu Ile Arg Val
 1055 1060 1065
 Ile Leu Pro Ala Ser Ser Met Glu Glu Ala Thr Asp Cys Ala Gly
 1070 1075 1080
 Phe Asn Leu Ile His Leu Val Ala Thr Gly Ile Ser Cys Phe Leu
 1085 1090 1095
 Gly Ser Gly Leu Leu Thr Leu Ala Val Tyr Leu Ser Cys Gln His
 1100 1105 1110
 Cys Gln Arg Gln Ser Gln Glu Ser Thr Leu Val His Pro Ala Thr
 1115 1120 1125
 Pro Asn His Leu His Tyr Lys Gly Gly Gly Thr Pro Lys Asn Glu
 1130 1135 1140
 Lys Tyr Thr Pro Met Glu Phe Lys Thr Leu Asn Lys Asn Asn Leu
 1145 1150 1155
 Ile Pro Asp Asp Arg Ala Asn Phe Tyr Pro Leu Gln Gln Thr Asn
 1160 1165 1170
 Ala Ser Ala Gly Tyr Pro Pro Leu Pro Gly Ser Leu Tyr Ser Thr
 1175 1180 1185
 Gln Gly Ile Pro Leu Val Arg Gly Ser Glu Tyr Trp Glu Leu Glu
 1190 1195 1200
 Ala Asp Leu Cys Leu Glu Val Leu
 1205 1210

<210> 38
 <211> 1203
 <212> PRT
 <213> Homo sapiens

<400> 38
 Ala Ala Ala Pro Phe Pro Asp Arg Pro Pro Ala His Leu Val Ser Ser
 1 5 10 15

Arg Arg Ser Ala Pro Pro Gly Ser Arg Glu Pro Arg Gly Thr Gly His
 20 25 30
 Leu His Pro Pro Leu Gly Val Ser Gly Ser Ser Trp Cys Leu Ala Cys
 35 40 45
 Val Ser Trp Met Pro Cys Gly Phe Ser Pro Ser Pro Val Ala His His
 50 55 60
 Leu Val Pro Gly Pro Pro Asp Thr Pro Ala Gln Gln Leu Arg Cys Gly
 65 70 75 80
 Trp Thr Val Gly Gly Trp Leu Leu Ser Leu Val Arg Gly Leu Leu Pro
 85 90 95
 Cys Leu Pro Pro Gly Ala Arg Thr Ala Glu Gly Pro Ile Met Val Leu
 100 105 110
 Ala Gly Pro Leu Ala Val Ser Leu Leu Leu Pro Ser Leu Thr Leu Leu
 115 120 125
 Val Ser His Leu Ser Ser Ser Gln Asp Val Ser Ser Glu Pro Ser Ser
 130 135 140
 Glu Gln Gln Leu Cys Ala Leu Ser Lys His Pro Thr Val Ala Phe Glu
 145 150 155 160
 Asp Leu Gln Pro Trp Val Ser Asn Phe Thr Tyr Pro Gly Ala Arg Asp
 165 170 175
 Phe Ser Gln Leu Ala Leu Asp Pro Ser Gly Asn Gln Leu Ile Val Gly
 180 185 190
 Ala Arg Asn Tyr Leu Phe Arg Leu Ser Leu Ala Asn Val Ser Leu Leu
 195 200 205
 Gln Ala Thr Glu Trp Ala Ser Ser Glu Asp Thr Arg Arg Ser Cys Gln
 210 215 220
 Ser Lys Gly Lys Thr Glu Glu Glu Cys Gln Asn Tyr Val Arg Val Leu
 225 230 235 240
 Ile Val Ala Gly Arg Lys Val Phe Met Cys Gly Thr Asn Ala Phe Ser
 245 250 255
 Pro Met Cys Thr Ser Arg Gln Val Gly Asn Leu Ser Arg Thr Thr Glu
 260 265 270
 Lys Ile Asn Gly Val Ala Arg Cys Pro Tyr Asp Pro Arg His Asn Ser
 275 280 285
 Thr Ala Val Ile Ser Ser Gln Gly Glu Leu Tyr Ala Ala Thr Val Ile
 290 295 300
 Asp Phe Ser Gly Arg Asp Pro Ala Ile Tyr Arg Ser Leu Gly Ser Gly
 305 310 315 320
 Pro Pro Leu Arg Thr Ala Gln Tyr Asn Ser Lys Trp Leu Asn Glu Pro
 325 330 335
 Asn Phe Val Ala Ala Tyr Asp Ile Gly Leu Phe Ala Tyr Phe Phe Leu

340	345	350
Arg Glu Asn Ala Val Glu His Asp Cys Gly Arg Thr Val Tyr Ser Arg		
355	360	365
Val Ala Arg Val Cys Lys Asn Asp Val Gly Gly Arg Phe Leu Leu Glu		
370	375	380
Asp Thr Trp Thr Thr Phe Met Lys Ala Arg Leu Asn Cys Ser Arg Pro		
385	390	395
Gly Glu Val Pro Phe Tyr Tyr Asn Glu Leu Gln Ser Ala Phe His Leu		
405	410	415
Pro Glu Gln Asp Leu Ile Tyr Gly Val Phe Thr Thr Asn Val Asn Ser		
420	425	430
Ile Ala Ala Ser Ala Val Cys Ala Phe Asn Leu Ser Ala Ile Ser Gln		
435	440	445
Ala Phe Asn Gly Pro Phe Arg Tyr Gln Glu Asn Pro Arg Ala Ala Trp		
450	455	460
Leu Pro Ile Ala Asn Pro Ile Pro Asn Phe Gln Cys Gly Thr Leu Pro		
465	470	475
Glu Thr Gly Pro Asn Glu Asn Leu Thr Glu Arg Ser Leu Gln Asp Ala		
485	490	495
Gln Arg Leu Phe Leu Met Ser Glu Ala Val Gln Pro Val Thr Pro Glu		
500	505	510
Pro Cys Val Thr Gln Asp Ser Val Arg Phe Ser His Leu Val Val Asp		
515	520	525
Leu Val Gln Ala Lys Asp Thr Leu Tyr His Val Leu Tyr Ile Gly Thr		
530	535	540
Glu Ser Gly Thr Ile Leu Lys Ala Leu Ser Thr Ala Ser Arg Ser Leu		
545	550	555
His Gly Cys Tyr Leu Glu Glu Leu His Val Leu Pro Pro Gly Arg Arg		
565	570	575
Glu Pro Leu Arg Ser Leu Arg Ile Leu His Ser Ala Arg Ala Leu Phe		
580	585	590
Val Gly Leu Arg Asp Gly Val Leu Arg Val Pro Leu Glu Arg Cys Ala		
595	600	605
Ala Tyr Arg Ser Gln Gly Ala Cys Leu Gly Ala Arg Asp Pro Tyr Cys		
610	615	620
Gly Trp Asp Gly Lys Gln Gln Arg Cys Ser Thr Leu Glu Asp Ser Ser		
625	630	635
Asn Met Ser Leu Trp Thr Gln Asn Ile Thr Ala Cys Pro Val Arg Asn		
645	650	655
Val Thr Arg Asp Gly Gly Phe Gly Pro Trp Ser Pro Trp Gln Pro Cys		
660	665	670

Glu His Leu Asp Gly Asp Asn Ser Gly Ser Cys Leu Cys Arg Ala Arg
 675 680 685
 Ser Cys Asp Ser Pro Arg Pro Arg Cys Gly Gly Leu Asp Cys Leu Gly
 690 695 700
 Pro Ala Ile His Ile Ala Asn Cys Ser Arg Asn Gly Ala Val Asp Pro
 705 710 715 720
 Val Val Ile Val Gly Arg Cys Ala Ala Thr Ser Cys Gly Ile Gly Phe
 725 730 735
 Gln Val Arg Gln Arg Ser Cys Ser Asn Pro Ala Pro Arg His Gly Gly
 740 745 750
 Arg Ile Cys Val Gly Lys Ser Arg Glu Glu Arg Phe Cys Asn Glu Asn
 755 760 765
 Thr Pro Cys Pro Val Pro Ile Phe Trp Ala Ser Trp Gly Ser Trp Ser
 770 775 780
 Lys Cys Ser Ser Asn Cys Gly Gly Gly Met Gln Ser Arg Arg Arg Ala
 785 790 795 800
 Cys Glu Asn Gly Asn Ser Cys Leu Gly Cys Gly Val Glu Phe Lys Thr
 805 810 815
 Cys Asn Pro Glu Gly Cys Pro Glu Val Arg Arg Asn Thr Pro Trp Thr
 820 825 830
 Pro Trp Leu Pro Val Asn Val Thr Gln Gly Gly Ala Arg Gln Glu Gln
 835 840 845
 Arg Phe Arg Phe Thr Cys Arg Ala Pro Leu Ala Asp Pro His Gly Leu
 850 855 860
 Gln Phe Gly Arg Arg Arg Thr Glu Thr Arg Thr Cys Pro Ala Asp Gly
 865 870 875 880
 Ser Gly Ser Cys Asp Thr Asp Ala Leu Val Glu Val Leu Leu Arg Ser
 885 890 895
 Gly Ser Thr Ser Pro His Thr Val Ser Gly Gly Trp Ala Ala Trp Gly
 900 905 910
 Pro Trp Ser Ser Cys Ser Arg Asp Cys Glu Leu Gly Phe Arg Val Arg
 915 920 925
 Lys Arg Thr Cys Thr Asn Pro Glu Pro Arg Asn Gly Gly Leu Pro Cys
 930 935 940
 Val Gly Asp Ala Ala Glu Tyr Gln Asp Cys Asn Pro Gln Ala Cys Pro
 945 950 955 960
 Val Arg Gly Ala Trp Ser Cys Trp Thr Ser Trp Ser Pro Cys Ser Ala
 965 970 975
 Ser Cys Gly Gly Gly His Tyr Gln Arg Thr Arg Ser Cys Thr Ser Pro
 980 985 990

Ala Pro Ser Pro Gly Glu Asp Ile Cys Leu Gly Leu His Thr Glu Glu
 995 1000 1005

Ala Leu Cys Ala Thr Gln Ala Cys Pro Glu Gly Trp Ser Pro Trp
 1010 1015 1020

Ser Glu Trp Ser Lys Cys Thr Asp Asp Gly Ala Gln Ser Arg Ser
 1025 1030 1035

Arg His Cys Glu Glu Leu Leu Pro Gly Ser Ser Ala Cys Ala Gly
 1040 1045 1050

Asn Ser Ser Gln Ser Arg Pro Cys Pro Tyr Ser Glu Ile Arg Val
 1055 1060 1065

Ile Leu Pro Ala Ser Ser Met Glu Glu Ala Thr Asp Cys Ala Gly
 1070 1075 1080

Phe Asn Leu Ile His Leu Val Ala Thr Gly Ile Ser Cys Phe Leu
 1085 1090 1095

Gly Ser Gly Leu Leu Thr Leu Ala Val Tyr Leu Ser Cys Gln His
 1100 1105 1110

Cys Gln Arg Gln Ser Gln Glu Ser Thr Leu Val His Pro Ala Thr
 1115 1120 1125

Pro Asn His Leu His Tyr Lys Gly Gly Gly Thr Pro Lys Asn Glu
 1130 1135 1140

Lys Tyr Thr Pro Met Glu Phe Lys Thr Leu Asn Lys Asn Asn Leu
 1145 1150 1155

Ile Pro Asp Asp Arg Ala Asn Phe Tyr Pro Leu Gln Gln Thr Asn
 1160 1165 1170

Val Tyr Thr Thr Thr Tyr Tyr Pro Ser Pro Leu Asn Lys His Ser
 1175 1180 1185

Phe Arg Pro Glu Ala Ser Pro Gly Gln Arg Cys Phe Pro Asn Ser
 1190 1195 1200

<210> 39
 <211> 1240
 <212> PRT
 <213> Homo sapiens

<400> 39
 Ala Ala Ala Pro Phe Pro Asp Arg Pro Pro Ala His Leu Val Ser Ser
 1 5 10 15

Arg Arg Ser Ala Pro Pro Gly Ser Arg Glu Pro Arg Gly Thr Gly His
 20 25 30

Leu His Pro Pro Leu Gly Val Ser Gly Ser Ser Trp Cys Leu Ala Cys
 35 40 45

Val Ser Trp Met Pro Cys Gly Phe Ser Pro Ser Pro Val Ala His His
 50 55 60

Leu Val Pro Gly Pro Pro Asp Thr Pro Ala Gln Gln Leu Arg Cys Gly
 65 70 75 80
 Trp Thr Val Gly Gly Trp Leu Leu Ser Leu Val Arg Gly Arg Lys Pro
 85 90 95
 Ser Gly Asp Phe Glu Trp Arg Gln Gly Trp Arg Gly Pro Gly Glu Glu
 100 105 110
 Asp Trp Pro Glu Ser Pro Ser Pro Lys Val Leu Met Asp Ser Ala Gly
 115 120 125
 Gly Leu Leu Pro Cys Leu Pro Pro Gly Ala Arg Thr Ala Glu Gly Pro
 130 135 140
 Ile Met Val Leu Ala Gly Pro Leu Ala Val Ser Leu Leu Leu Pro Ser
 145 150 155 160
 Leu Thr Leu Leu Val Ser His Leu Ser Ser Ser Gln Asp Val Ser Ser
 165 170 175
 Glu Pro Ser Ser Glu Gln Gln Leu Cys Ala Leu Ser Lys His Pro Thr
 180 185 190
 Val Ala Phe Glu Asp Leu Gln Pro Trp Val Ser Asn Phe Thr Tyr Pro
 195 200 205
 Gly Ala Arg Asp Phe Ser Gln Leu Ala Leu Asp Pro Ser Gly Asn Gln
 210 215 220
 Leu Ile Val Gly Ala Arg Asn Tyr Leu Phe Arg Leu Ser Leu Ala Asn
 225 230 235 240
 Val Ser Leu Leu Gln Ala Thr Glu Trp Ala Ser Ser Glu Asp Thr Arg
 245 250 255
 Arg Ser Cys Gln Ser Lys Gly Lys Thr Glu Glu Glu Cys Gln Asn Tyr
 260 265 270
 Val Arg Val Leu Ile Val Ala Gly Arg Lys Val Phe Met Cys Gly Thr
 275 280 285
 Asn Ala Phe Ser Pro Met Cys Thr Ser Arg Gln Val Gly Asn Leu Ser
 290 295 300
 Arg Thr Thr Glu Lys Ile Asn Gly Val Ala Arg Cys Pro Tyr Asp Pro
 305 310 315 320
 Arg His Asn Ser Thr Ala Val Ile Ser Ser Gln Gly Glu Leu Tyr Ala
 325 330 335
 Ala Thr Val Ile Asp Phe Ser Gly Arg Asp Pro Ala Ile Tyr Arg Ser
 340 345 350
 Leu Gly Ser Gly Pro Pro Leu Arg Thr Ala Gln Tyr Asn Ser Lys Trp
 355 360 365
 Leu Asn Glu Pro Asn Phe Val Ala Ala Tyr Asp Ile Gly Leu Phe Ala
 370 375 380
 Tyr Phe Phe Leu Arg Glu Asn Ala Val Glu His Asp Cys Gly Arg Thr

385		390		395		400
Val Tyr Ser Arg	Val Ala Arg	Val Cys Lys Asn Asp	Val Gly Gly Arg			
	405		410		415	
Phe Leu Leu Glu Asp Thr Trp Thr Thr Phe Met Lys Ala Arg Leu Asn						
	420		425		430	
Cys Ser Arg Pro Gly Glu Val Pro Phe Tyr Tyr Asn Glu Leu Gln Ser						
	435		440		445	
Ala Phe His Leu Pro Glu Gln Asp Leu Ile Tyr Gly Val Phe Thr Thr						
	450		455		460	
Asn Val Asn Ser Ile Ala Ala Ser Ala Val Cys Ala Phe Asn Leu Ser						
	465		470		475	480
Ala Ile Ser Gln Ala Phe Asn Gly Pro Phe Arg Tyr Gln Glu Asn Pro						
	485		490		495	
Arg Ala Ala Trp Leu Pro Ile Ala Asn Pro Ile Pro Asn Phe Gln Cys						
	500		505		510	
Gly Thr Leu Pro Glu Thr Gly Pro Asn Glu Asn Leu Thr Glu Arg Ser						
	515		520		525	
Leu Gln Asp Ala Gln Arg Leu Phe Leu Met Ser Glu Ala Val Gln Pro						
	530		535		540	
Val Thr Pro Glu Pro Cys Val Thr Gln Asp Ser Val Arg Phe Ser His						
	545		550		555	560
Leu Val Val Asp Leu Val Gln Ala Lys Asp Thr Leu Tyr His Val Leu						
	565		570		575	
Tyr Ile Gly Thr Glu Ser Gly Thr Ile Leu Lys Ala Leu Ser Thr Ala						
	580		585		590	
Ser Arg Ser Leu His Gly Cys Tyr Leu Glu Glu Leu His Val Leu Pro						
	595		600		605	
Pro Gly Arg Arg Glu Pro Leu Arg Ser Leu Arg Ile Leu His Ser Ala						
	610		615		620	
Arg Ala Leu Phe Val Gly Leu Arg Asp Gly Val Leu Arg Val Pro Leu						
	625		630		635	640
Glu Arg Cys Ala Ala Tyr Arg Ser Gln Gly Ala Cys Leu Gly Ala Arg						
	645		650		655	
Asp Pro Tyr Cys Gly Trp Asp Gly Lys Gln Gln Arg Cys Ser Thr Leu						
	660		665		670	
Glu Asp Ser Ser Asn Met Ser Leu Trp Thr Gln Asn Ile Thr Ala Cys						
	675		680		685	
Pro Val Arg Asn Val Thr Arg Asp Gly Gly Phe Gly Pro Trp Ser Pro						
	690		695		700	
Trp Gln Pro Cys Glu His Leu Asp Gly Asp Asn Ser Gly Ser Cys Leu						
	705		710		715	720

Cys Arg Ala Arg Ser Cys Asp Ser Pro Arg Pro Arg Cys Gly Gly Leu
 725 730 735
 Asp Cys Leu Gly Pro Ala Ile His Ile Ala Asn Cys Ser Arg Asn Gly
 740 745 750
 Gly Arg Gly Pro Arg Gly Ala Ser Trp Ala Ala Val Gln Ala Arg Pro
 755 760 765
 Val Ala Ser Gly Phe Gln Val Arg Gln Arg Ser Cys Ser Asn Pro Ala
 770 775 780
 Pro Arg His Gly Gly Arg Ile Cys Val Gly Lys Ser Arg Glu Glu Arg
 785 790 795 800
 Phe Cys Asn Glu Asn Thr Pro Cys Pro Val Pro Ile Phe Trp Ala Ser
 805 810 815
 Trp Gly Ser Trp Ser Lys Cys Ser Ser Asn Cys Gly Gly Gly Met Gln
 820 825 830
 Ser Arg Arg Arg Ala Cys Glu Asn Gly Asn Ser Cys Leu Gly Cys Gly
 835 840 845
 Val Glu Phe Lys Thr Cys Asn Pro Glu Gly Cys Pro Glu Val Arg Arg
 850 855 860
 Asn Thr Pro Trp Thr Pro Trp Leu Pro Val Asn Val Thr Gln Gly Gly
 865 870 875 880
 Ala Arg Gln Glu Gln Arg Phe Arg Phe Thr Cys Arg Ala Pro Leu Ala
 885 890 895
 Asp Pro His Gly Leu Gln Phe Gly Arg Arg Arg Thr Glu Thr Arg Thr
 900 905 910
 Cys Pro Ala Asp Gly Ser Gly Ser Cys Asp Thr Asp Ala Leu Val Glu
 915 920 925
 Val Leu Leu Arg Ser Gly Ser Thr Ser Pro His Thr Val Ser Gly Gly
 930 935 940
 Trp Ala Ala Trp Gly Pro Trp Ser Ser Cys Ser Arg Asp Cys Glu Leu
 945 950 955 960
 Gly Phe Arg Val Arg Lys Arg Thr Cys Thr Asn Pro Glu Pro Arg Asn
 965 970 975
 Gly Gly Leu Pro Cys Val Gly Asp Ala Ala Glu Tyr Gln Asp Cys Asn
 980 985 990
 Pro Gln Ala Cys Pro Val Arg Gly Ala Trp Ser Cys Trp Thr Ser Trp
 995 1000 1005
 Ser Pro Cys Ser Ala Ser Cys Gly Gly Gly His Tyr Gln Arg Thr
 1010 1015 1020
 Arg Ser Cys Thr Ser Pro Ala Pro Ser Pro Gly Glu Asp Ile Cys
 1025 1030 1035

Leu Gly 1040	Leu His Thr Glu Glu 1045	Ala Leu Cys Ala Thr 1050	Gln Ala Cys
Pro Glu 1055	Gly Trp Ser Pro Trp 1060	Ser Glu Trp Ser Lys 1065	Cys Thr Asp
Asp Gly 1070	Ala Gln Ser Arg Ser 1075	Arg His Cys Glu Glu 1080	Leu Leu Pro
Gly Ser 1085	Ser Ala Cys Ala Gly 1090	Asn Ser Ser Gln Ser 1095	Arg Pro Cys
Pro Tyr 1100	Ser Glu Ile Arg Val 1105	Ile Leu Pro Ala Ser 1110	Ser Met Glu
Glu Ala 1115	Thr Asp Cys Ala Gly 1120	Phe Asn Leu Ile His 1125	Leu Val Ala
Thr Gly 1130	Ile Ser Cys Phe Leu 1135	Gly Ser Gly Leu Leu 1140	Thr Leu Ala
Val Tyr 1145	Leu Ser Cys Gln His 1150	Cys Gln Arg Gln Ser 1155	Gln Glu Ser
Thr Leu 1160	Val His Pro Ala Thr 1165	Pro Asn His Leu His 1170	Tyr Lys Gly
Gly Gly 1175	Thr Pro Lys Asn Glu 1180	Lys Tyr Thr Pro Met 1185	Glu Phe Lys
Thr Leu 1190	Asn Lys Asn Asn Leu 1195	Ile Pro Asp Asp Arg 1200	Ala Asn Phe
Tyr Pro 1205	Leu Gln Gln Thr Asn 1210	Val Tyr Thr Thr Thr 1215	Tyr Tyr Pro
Ser Pro 1220	Leu Asn Lys His Ser 1225	Phe Arg Pro Glu Ala 1230	Ser Pro Gly
Gln Arg 1235	Cys Phe Pro Asn Ser 1240		